

## INTRODUCTION

A pet it ftoir n r l e m a w a s i n d e y d h S e i e Q r u b i t h E P A d m i n i s t r a t o r J u n 2, 0 1 6 w i t h i c m c l u d e d r r e q u e s t e d s e t h e m e g a t o m e x n c e s s e m i s s i o n t a s t u e l b e s s o u r d c u e s p e g i o s d t s a r o t s u h p u t o d a o w t n i v o i r t i e s , m a l f u n c t i o n s i n t h e A s i n s i p t r i c a p l o s a p o r t d i n e g t p d i i m o n i t n c l a u d e c h a n i g i e t l s o n g - s t a n d e r p p o e t t h e A A v i r l e g a d d h a v a i l a b i l i t y a n a r r o a w i l l y a r t e d r m a f e f o e r e r e a x i c r e s s s i b m o s f s r e o m u n p l a s s E P A i n d o f t i a d s u b s t a n d a d e o u t a n t e y x s a l s p r a c t , a s o t a e l o v i p s r o p e P A b f e t r d l e t e x r a u s a d e l o w d a m g a f f i r m a f e f o e r e r e a x i c r e s s s a i s o n r s s i v s i t e A A r e q u i r e t h e E S U s b m i c t o t r e n d e n t h e g e n e s a p p y E R A o r s i g n a l a f f i r m a f e f o e r e s e i t i o n .

E i g h t h e a h a f s t t h e l o o s t h e o m m e p r e t r E P A s s a e u p p l e m e n t a l n o t p r e p o t s a i d g i t i g o r a n t h e y p a i s s i c h e i l e o r l u a b r s g i n a l p e t i w i i t o m s p t e c h t i e s s o u f e f f i r m a f e f o e r e r e a x i c r e s s s i j o u n d s i p c r i o a c l e e d t i c n e g o s i s n e u l y m i c t o t l e n d i e m t s r e s p d i n s h e u p p l e m e n t a e d i n s d u s e ( d i b ) h d e c a d e s - l o n g h i s t o t r h y e l P - a p p r i b i v e n t a f e a n n e d e p s r e d e c f e o s r m o e r f a e c t i v e c o n t m r e a l s u i n t h e i s t o t r h y e e x s a l s p 2 v h E P A p r s o p o g a o t r h e e s h o l d o i n t h e f e i c t i r c u i d A p p e a n t ( 3 t ) h s e s i l o p a i l l e g a l l y p r e d e t e t r e n x i s a l s p l a d e q u a c y .

A f t t h e f e i r R a i l w a s p u b l i s h e d a t t h e x a n s t i c E Q h a l l e i n q u e t d e f i l a P r e g i f t o R e n v i s t e v P A F i s r a u l a n s t a t e m a n o r s i f e i f o e d o b e r 2 8 2, 0 1 6 , c o n t a t h a s t t a n t e a n s f e o E P A p o s s i t i v e n m e n t a d e a v a i l s E P A e c r o m m e n y i t n t e r p e a r t t a i d e e s q u W h e e d h h f e i r R a i l l e w a p r o m u l a g r a d i e t d i t o E v e a d s u r p r t i d s i e s d c o v e r c h a n g e s e e n t h w t s i l g n i f a i n o d a i n s t p l r y o p o r i n t i p o t r e a k t e s h l a y s e c f h o a r a n g e s b a s f i o E P A o r e c o n i s t f s i e r a u l l e a d d i E P A m e s c e a n d d p r e g i o n a l C o n s i s t u e l s e a p p o r e t s o n s i d e h f e i t r a u l l e .

B e c a u s e o f t o r e c f l o o m a d n t a i t h n o i m g g - s p a n i o n i r t n e g r p r e t a t i o n o f t h e A A v i r l e g a d d h u s e a f f i r m a f e f o e r e r e a x i c r e s s e o n t s r t o r l a i t e S g l y P , T C E i Q e s p e c t f u E P A g r e a m e t e s r t s i d e a s a n d i n f o r m a t i o n p r o v b e e o s u c r h e c o n s i d e r i a p t i t h f e i R a u l l e i g n i f f l i a a n s d t t h r e o t i c e d e f e h c e t r s e a d e a f a e d t o o e n v a p n r e o c e e d i n g f o r r e c o n s i d e h e u t w o t h i n s e a m p e r o c e d u g a s s u h a l b e e n

<sup>34</sup> 7 F e R e g 2 4 5 8 2 2, 0 1 3 ) .

<sup>35</sup> 8 F e R e g 3 8 3 9 8, 3 8 8 1 u n 2 2, 0 1 E P A l ' o n g - s p a n d i v i n g s e n t h e p h y s i c a l i t a f t h e o s t c o m m o n e m t i y p s e i s o m t s r e o c h n o w d e r e s , o p e r a a t f i u d n a p a c i d p y o s s d b i t e r a t n u s h u t d o v e r e . M o n S t u . l p h u r & C h e m o v . E P A 6 6 . 3 d 7 4 1, 9 2 ( 9 C i n 2 0 1 0 ) .

<sup>36</sup> 7 F e R e g 2 4 5 9 1, 2 4 7 9 2 2, 0 1 3 ) .

<sup>37</sup> 7 F e R e g 5 9 1 8 e p 7 2, 0 1 4 ) .

<sup>38</sup> P e t i f t o R e n v i f e i w e i d t h f e i c t i r c u i t A p p e a r U s 1 9 2, 0 1 5 e m o v e d t h d e . C i r c u i t A p p e a r A s u g 2 8 2, 0 1 5 n d o w a o f t h e a s e y W e d t e r C o k l e n , v E P A D . C C i . N o 1, 5 - 1 1 6 6 ) .

<sup>39</sup> 8 1 F e R e g 1 1 0 2 3 2, 0 1 6 ) .

a f f o h r a t e h d e n f o r r b a t a i v c a n i d a t e i e n t e r e u w a s r o p o w s o u d l , d  
v i o l a n c e o e t r i e c o u i r o e n e t h a d m i n i s t r o a c t e d u n d e r t h e A A E ' 1 a n d  
t h o e A A ' 1 :

## STANDARD REVIEW

A d e q u a t e a e f o r m t h e s e a r t a e d e s o n p a r t o f r e t t o p a i r t t y i c n i p a t e  
t h r e u l e m p a c k d i s t r i b u t i o n t h e n e e n s t i g t n e e n s t h e a t  
a g e n e g u l a t t i e s n e a p r o e s d i r e c t o r s d i n n e ( r 2 t ) e n s u r e  
f a i r t n e f s f e p c a t r e t a i n e d i t g i a e f e p c a t r e t a i n e s p o r t u d r e i v e y l o p  
e v i d e n c e c b o d p p t o h r e t b r j e c t t o i h o e n d e t h e r e e n t h y a t n h e e  
q u a b j t u y l i r e i v a l e w . " - 1 3

T w o t a t r u e t q u e s P A e r o v t i e d e a n s o t h i e n r t e m p a s r t a e d d e s n a t e c e  
o f h f e i R a i l h a d u n d e r s l u p i n g e t t i o n t h a t P A ( e ) u n d e r f a e t s  
" e a a g h e s b u l i a n t e r p e e s t s e d e i g h t e t i f t o i r b i e s u a n c e ,  
a m e n d m e n t p e a r l u l f e a . i t o b s e r v e a P A p r o c e d u r e s ,  
r e v e e s i r b i r e h a e p e s e v e r e s i u n l r d e h r [ e C A a a ] e l t h a P A  
a l l e d R a g r a n P e t t h i w i s i t o m o e u e t t a i n p y a r t i s t u a l n a d r a r d .

I a d d i t t h o e A n a , r o v g e r e e r a d l i r s e i l o a n t a i d m g i n i s t r a t i v e  
p r o c e e d i n g s i r e i v a t h e A A e q u e i P r a e d s a k h a e d d i t m i c o m e a l ,  
d e t a s i t l e e p d r o v a s i f a g e o m f e h e t o p R s e l e a ' s a i n s l u r p t o h s a e t  
i n c l u s i v e s m a i f ( A t ) h f e a c d a a h w h i t c h p e r o p o s i t i o n s a s j s ( e B ) ;  
t h m e e t h o d u o s l e o d y t a i t i n d e a n g a d a n a l y t i c a n g a n ( d C t ) h e  
m a j l o e r g a l t e r p r e p a t i o n s i d e a d a l e i r d h o s i r o g o s i e e . " - 1

S p e c i f i c i t y ( d l ) y ( , 7 ) f ( o r p m p a m o d v a t d o r i s y s c r e t i o n a r y  
r e c o n s i d e r u a l t e i h e r y A d m i n i s t r a t o r e o c r o y n s i d e r a t i o n  
p r o v a e n w a ' s i m t p r a c t i c a t i o n j e w t t p h m e b d d i m m e n t  
p e r b o i d f i g e r o u f n o s s i o h j e a t o a e f a t t e p e e r f o p d u b d i m m e n t  
. a n d s u o h j e c o c e n t e a d e v a m o e t c o i n t e r e u l e . "

D i s c r e t e i o n n a s r i y d a e l r a v t a i i o l n a d e B 7 ( d ) l ( P T P ) G ( n B ) u s t r i e s ,  
I n v C a s t h d e . C i r o a t t e h d a e t i t c i o u c l e d m n e n a t h e w u l e  
p r o m u l g a t a e f d r e m a n y d h o e o u o r a , l t e r n c a o t u f l i v e p e y t , i t i o n  
f o r r e c o n s i d i e r r e c t i f e l y a y e m o u t g r e u d e s s h u a d e e n  
p r o m u l t g a t e e d a s r i e e a r t c h l a e t i s t i f t o R e v h e a l e e n f i l e d

5 U . S S 5 . 5 C - . 5 9 .

14 U . S S 7 4 0 1 - 7 7 0 0 .

- A z m R a d R i e o l L a e y a g l u n e c F . C 5 2 4 . 2 2 2 3 6 D . C C i 2 0 0 8 i ) n t e w a a a t i o n  
m a r k s i t t e d ) .

- 1 : n u h l d m i M e i v e o r k o e A r n s v M i r s e f & H e y a A d m i n i s t r . 3 1 2 5 1 0 2 , 5 9  
( D . C C i 2 0 0 5 c ) i S m a R e l f i l R e a p h a s e - T D a e v o n r v o E e P A 0 5 . 3 0 5 4 7  
( D . C C i 1 9 8 3 ) )

5 U . S S 5 . 5 C - . 5 9 .

- S m a R e l f i l R e a p h a s e - T D a e v o n r v o E e P A 0 5 . 3 0 5 2 3 D . C C i 1 9 8 3 ) ) .

6 C A A 5 0 7 ( d s ) e S m a R e l f i 7 n o 5 r . 2 5 1 8 - ( 1 d i s c u s s i o n i r e m e C A A 5  
7 6 0 7 ( d ) ( 3 ) ) .

anvlasendiinDe. C i r C o u o t A p p e a l h e o u n r o t t e h d a i t t h e r  
r o u w t o e u p d o v a i e e i e w i r r i g a d o n t e m p o r r e a n o e f o l d e s e n c y ' s  
c o n s i d e r a t i o n e t, h e a r n t h e p o s t c a t i o n a d i c a t i o n s

F o e r x a m p l e J a n u a r y 1 2, 2 0 0 9 r e c o r d e d t h e n e c e s s a r y a d m i n i s t r a t i o n  
r e g a r t d i r e c t i o n s i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
a n u m b e r o f t h e c o n s i d e r a t i o n s i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
1 0 2, 0 0 E P A, A s e i d d s i s c r e g t r i a n a t c o n s i d e r a t i o n s i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
r u l e t h e N A A G S o r z o f t h e e i n t i l i d u s h o p p r o s t e i d e m q u e t s h a i t n e g  
D . C i r c u i t C t o h e r i e s v a h o e g a t u d e l t d i c e a s c h s a l l e h r e g u i l n e g  
i a b e y a t h d e a s f i o E P A a c s t w a n d s e s t i a b l o i w i e a r p p r o p r i a t e  
o f f i c i a l i n s e a d m i n i s t r a t i o n e s t i a n d a d r e d s e m m i e n t e h e r  
t h e h o b e n d i n t m o d e d p e d e r r e i c s e n s t i d e s e d .  
r e c o n s i d e r a t i o n t o e n t h a n w o e y a f a t h e i o z b n e a n d a r e d  
w a s r o p o s a n d p o u n t e e a f t t e f e i m a v a s u b l i s h e s p b o s e  
t h r e e c o n s i d e r a t i o n s p o u n t e e a f t t e f e i m a v a s u b l i s h e s p b o s e

I a d d i d i n a m u l a 4 2, 0 0 E P A, A e n t h e s a t a t h e w e r s p e e y t ' i s t o i r o n  
r e c o n s i d e r a t i o n e s i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
s u b m i t t e d b e r d u 5 2, 0 0 ( 5 d 6 a y a s p e r b l i c a t i o n a l l t e w ) m o n t h s  
l a t e r M a r c h 1 2, 0 0 N e, v e r s e y s a s e m o r t d e p o c e n t i a t i o n i n t h e m t g i c a l  
g r o u a n s e r e i n d i h i e n d i e p o c e n t i a t i o n i n t h e m t g i c a l  
g r a n i t e i d t h i m e o n t h a s p r 2 i 4 2, 0 0 - 9 a u l l o n t a h f s t e f e i m a l e  
w a s u b l i s h e d n f, i E P A o p p o s t e i d e m q u e t s h a i t n e g C i r c u i t  
C o u h r o t t d i c e a s a b e y a n d E i P a g r o c e e d i n g s .

A t h i e r x d a m p l e s h e P A d ' e s n d i a p l e t i o t n i a m u l a 4 2, 0 0 s u b m i t t e d  
E a r t h J u e s t a i e P a m u l a 4 2, 0 0 s u b m i t t e d i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
p a r t i n c a u t l a b l i c a t i o n M a y 1 2, 0 0 E a r t h J u e s t a i e P a m u l a 4 2, 0 0 s u b m i t t e d i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
p e t i t i o n i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
2 0 0 t 9 0, g e w i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
h e l d b e y a n c e .

T h e e x a m p l e s i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
a u t h o r i t y e d t h e A P A r a v o r d e C a f a b e r n g E r P a A n a t i n e g t i t i o n  
f o r r e c o n s i d e r a t i o n e s i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
t h e d e m o n s t r a t i o n h a v i n g a s m p o s s o t t o r a i s e c e r t a i n  
o b j e c t i o n s t o t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d  
p e r m a d d a t e t E a r t h J u e s t a i e P a m u l a 4 2, 0 0 s u b m i t t e d i n t h e p r o c e s s i n g o f t h e E P A d e c i s i o n i n t h e s e v e n e d

<sup>47</sup> 6 5 9 . 2 2 3 a 9 t 2 5 ( O D . C i r 9 8 ( 1 " p a e t i m a t i o n e f i d e d e w i t h E P A i n t e r p r e t  
o a m e n t d i s e t a n d a o r i d t, h d t h e w i d e b i t n e s e p s e, m i i f d y n i g h t - t o - m i d n i g h t  
r e p o r t r i o n g e d u c e i d 2 1 h . p s 7 0 6 . 0 7 ( d B 5 ) U 7 . S s 5 0 5 . 3 ( 4 9 7 6 ) ) .

<sup>48</sup> I d c . i , t 0 h g e h a p d e m l e a v a t j r o i e b e v T r a 5 1 h 5 . 2 6 d 5 , 4 6 5 - 6 8 C i ( D . C .  
1 9 7 5 ) .

<sup>49</sup> D o c N o E P A - H Q - O A R - 2 0 0 5 - 0 1 7 2 .

<sup>50</sup> 7 5 F e R e 9 3 ( 8 J a n 2 0 1 0 ) .

<sup>51</sup> D o c N o E P A - H Q - O A R - 2 0 0 2 1 2, 0 0 7 4 .

<sup>52</sup> D o c N o E P A - H Q - O A R - 2 0 0 3 - 0 0 6 2 ) .

<sup>53</sup> S e l e o r G a r o v E P A 5, 3 8 . 3 9 9 2 7 ( D . C i r 0 0 8 ) .

# G R O U N D S R E C O N S A I D I E O R N

I . E P A M i s s c a t e r o i z l a t e i x S a l P a N o K n o w n A u f n t t e h r e  
C l o o s t e h P e u b Q d i n m e P n e t r a n d h e r e l f W a r s e m , p o s s o t t C I E Q o  
O b j B e f o h a i m e

O r O c t o b 2 2 , 0 1 a 6 f , t t e o e l o s t e h p e u b l i c p e m i n e t h f e i n a l R u l e ,  
E P A i i f d i A a n s w e B r i i n e y f a l t e r l n C E R A t a t i n g h e h a t  
a f f i r m e t e i n s e e l a e w e n a r d a o v i t t d i h T e x S a l s P " t h a a n t d  
" [ t T ] e h x S a l s P x i f b o r e d c a d e s w a i f t h i o r u d t e f t e h T e b . a s i s f o r  
e v a l u a t h T e e n a g s f i r d e a f t e i n s e e w l y a i n s e t h l a e n d a r s o t  
p a o f h p e r o p o s a a a l t p i o n a m o b i l e s s p o t n s u e b s d i n m e n t s .

T h i n s p o s i r t e i f o l a e o n d a n m e i n s t u a n l d e r o s t l a e n d h a e f e i r m a t i v e  
d e f e p n l s a y m i s e x a v s e e m i s s o n s i t o r a l e g y r e s s i h t l e e s  
f a o t r e s e i m t o e n d e r n e t g s a t d h S e h R g - a p a p f r o i v r e n d a f t e i n s e e t h e  
T e x S a l s P n , c l u d i n g t e g f i n t e r g e u a l t a n t e e n r t e m o i f s p i r o e n s e d i n g  
t h a e f f i r d e a f t e i n P s e e b d o i n m e a n i g h l i f g s a i t g e n d i f h a e f a n i c r e m a t i v e  
d e f e h n a s s e t h T e e . c , o x n a s r t o r h a t s a v g h y o f T e h . C A A e q u t i h r a s t l P  
" i n c e l n u f d o e r e m a b s l e i o n n i s t a n t o f t o h o e s m t h e a s u n r e a s o , s ,  
t e c h n . i g a u n e a s p e e c e s o s a a p r y o p t m i e a e t t h e A A Q S a d  
" p r o g p a m v f i o d r e e n f o r c o e f m t e h n e t e a s u r e a s l . s " o o v i d e s  
s t a h t a e s e a e b i t l e i d y f e r c o t n a r b o p u t s i t h m e a s u t h e s e a n d e q u a t e  
t m e e t h N e A A Q S .

F u r t i h n e p r , o p E P A e i , t e i r i a n t t e e d r p t b a a f f o m d e a f t e i n s e e  
c a b e c o n s i w s i t t e h n e t S A A t h i n g r d f e o a r a f f i r d e a f t e i n s e e  
p r o v i t s i c o m s i w s i t t e h n e A i , ( h a t s o e a r r o w a y a d d r e s s  
o n t h o e s e x e c e r a s s s t i h a n t u e n a v o i ( d i a i a ) n i e q t e w i f e h r e  
r e q u i r t e n d e a n t i s s i i m o n t a p t p c l o y m s t i n ( u i o c u e s n l p y o v i d e  
r e l f i r e d i n j u n c t a n e l i c i a e n ) n i o e t f e w ; i f t h o e v e r a r c h i n g  
r e q u i r o e f n h e A A s , u a l a t t a a m n d a n i g n t a h N e A i A n Q S i , t t i o n t g s  
S l a p p r o f a t t i C h e e a f s f i r d e a f t e i n s e e a e t t t h e s i l t m p o r t a n t l y ,  
E P A e p e a p o e d i t t h i a o t n s t e r p a e t a w h i t i o s p o a f f i r m a t i v e  
d e f e i n s e e a s o n a b l i d o e n o i t r a t u s w e i f t h o e v e r a g o h o l f s g t i t l e  
o f h C e A s , u a l a t t a i a m m e a n i t n t e o n f a h n e A A Q S a d l a l a r i n g

<sup>54</sup> B r o R e s p o E P A h t W a l C e k l e n , c E P A p 1.5 - 1 ( 1 D 6 . 6 C O c 2 8 r . ,  
2 0 1 6 ) .

<sup>55</sup> T h e x a f s f i r d e a f t e i n s e e x c e n s s f i r o u n s p l a m a n i e n d t e s t a a n r c t e u , p ,  
a n s h u t d ( W a s c ) t i a n t i r o n e n - e x c e s s i v e e m i r s l i w d e s s e v e n  
e m i s s i o n s p s w h s a c t t e h f e u n c t e i q u n i a d a n l a e l n f t u n 8 0 f i e a d a n i n .  
C o s 4 0 1 . 2 - 2 2 0 b )

<sup>56</sup> S e e . , g h f e o l l o d o n n l e E t P A - H Q - O A R T C E Q 2 , m n 2 2 2 2 s T e x a s  
C o m m i s s i o n o r Q u e a n R t e a g l y r S t i a t i o n l e m e P n l t a n t 2 5 0 - 1 3 3 5 v ,  
2 0 1 d 4 o ) c k e 0 9 3 B 6 C ; C A p p e a b C p m m e o n t h B A P ' r s o p 8 1 0 e a d i n l e l a t e d  
A c t a d n - 3 N 6 2 0 1 d o ) c , k e 0 9 5 T 8 e ; x M S S o r k G i m o g U p m m e a n 5 t - s 8  
( N 6 2 0 1 d o ) c , k e 0 9 5 8 .

<sup>57</sup> C A A § 1 0 ( 4 2 ) ( 2 8 ) 7 0 4 . 1 0 ( ( a e m p 2 a ) d s d i e s d ) ,

<sup>58</sup> S e T e r a v i n R D 4 2 U S 6 0 7 , 9 1 9 7 5 ) .

<sup>59</sup> 7 8 F e R e g 2 4 5 9 2 4 ( 7 0 2 2 2 , 0 1 3 ) .





t haes s o dEiPAte g di sounbs jt) d d d e i r j e u c r t i s d f b r e u i l o c i n i n g c u i t  
c o u<sup>6</sup> f t . "

U n d t e h r e p s r e i n c n i o p w l e e c s o , g n y E P A f l a e l o p p o f b a e m e n d m t e o n t s  
i t r e g i c o o n n a s l i s u e w h s i y c h a s f t t e o e l o s p e u b d d i m m e n t h F e i n a l  
R u E P A S ' l s P a a l d l o e x i a s s m p r o t p h e e r . S o u o r A t p p e f a o t r a F e i f t h  
C i r c u i t h , j u o v t e d x l a s l i o m i n d i e n c g i t s h i t o h T e e x a s  
a f f i r m e d t e p r o v i d s o i o " h n s e g t a d e e s t o u r t t ' s i t a s s e d i s c t i  
c i p e n a u s i t t h e r i t e r i a n C o A 1 l 3 i ( o e e ) d s e t a p e r m i t t i n g  
a u t h o r i t t y o ' e s c o p v e n i r a f T h e s C t h r c h u o i l d i d i n g r e c t l y  
c o n t t r a P A p o n s t a t i o n a l s l s P a f l d T r e x<sup>6</sup> a B s e . c a E u P A s s i n c e  
a d o p i t t e s d r e g i o n a d g u b a n t u i s t o s h o n d i e n c g i w h e n s  
a c t i n g a c w u t j u i t s s a n d h e o e e o o a s i o t e h F e i t R i a o l i n e  
a p p r o p r i a t e d e s s a r y .

### I l E P A s o f t o r e c f o e m d M a i n l s o i n g i - S g R a n e l - i n R g D C I n t e r p r o e A t f a f t i i r n d a e t f i e v n e S l P

E P A s o f t o r e c f l o o m e d s e i r p s i n l o r n , g s t i a m t d e i m p g r e g a t d o n g  
t h p e e r m i s s a n a f f i t t h e a f t e r v s e a S W E R s u m m a r i z e d t h i s  
i n t e r p r o e h C o A t a i e o f n b h F e i C t h r c u i t , s t a t i n g t h a t :

[ T h e i s g e a n a t u e t d h o d e t t y w n h i a n b e n s t a v t i u o t l e a s t i o n ,  
a n d d i s t i n g u i s h t i a a d u i a v e i l t y a e t t w o e e f n f e r e n t  
t y p o e f s i o l a t t h i o p n a s o . f h e e s s e f l t e i x a i l e c b g h z e d  
r e g u l a a b t i o l r d ' e s f e i n f o r e m a b s l e i o n n i s t<sup>6</sup> a t i o n s .

I n h F e i R a i E P A e v e i r p o e d i f t o i l o l n o w 2 e h 1 g 4 c i o s t i h d e C .  
C i r C o u i t M R D C E P A ( N R D s C t ) a t t h t h r e e a s o n f i h e g u i r n t  
[ N R D h ] d i t h a t h e s t a l t e s e P A h a e n e a u t h o b i p r y o v i t s o i o n s  
a l t e j e u r i s d f c f e o e r a b s p e e s a f d v i i e o s l a t C i A o A n s  
r e q u i r t e m r e a u f g f h i r o e a f t e p r o v e i s E P A o s r s i " g l i o n a g l - , s t a n d i n  
i n t e r p r e t a t a t h i e s c a f f i r m e d t e i n v e s e p i o s l b i e y a i u t s e  
p r o v i d a v s i e t s h a e u t h o h e p e t o m p l e m h e e n i t f o r c p e r m e g n r t a m s  
a s h e e f e i t .

T C E u Q r g E e P s A o e c o n i s t r i s e e e c n h t a l n y g n e t d e r p i t t o t t h e n  
s i g n i i f m i p c a b n i t t s t e r p w e u h a d v i e n t h T e e x S a l s P o t r h f e o l l o w i n g  
f o u e a s n o e n i s t , h o e A A o t r h e R D d e c i s i o n f f o r r o m e l s o e i r a v s i E r P g A  
p r i i o n t e r p r e g a t d i p e n g m i s s a b f i l i d e y f e i v e s l s P .

<sup>66</sup> 8 F e d . 5 R 2 5 0 2 5 2 - ( 5 A 0 u 2 9 2 3 0 1 5 ) .

<sup>67</sup> L u m i n G a m t e r G a d L i L o C E P A , 1 4 . 3 4 3 5 1 3 . ( 9 5 C ' i d r 0 . 1 3 ) .

<sup>68</sup> 7 F e d e 5 5 9 5 9 9 4 4 - ( 5 S 5 e 9 7 2 5 0 1 a 4 n ) d F e d e 9 3 8 3 9 8 5 1 - a 3 3 5 2  
3 3 9 6 8 - ( 3 J 3 u 0 2 2 0 1 5 ) .

<sup>69</sup> B r o R e s p o E P A 2 7 L , u m i n G a m t e r G a d L i L o C n . E P A , 3 4 ( 1 5 C ' i h r .  
2 0 1 3 ) .

<sup>70</sup> 7 4 F . 3 0 5 5 . C C i 2 r 0 . 1 4 ) .

<sup>71</sup> 7 F e d e 5 5 9 2 5 9 2 9 .

A .E P Ap'rse - NiRnDtCe r p w a j s u a d t i i a m p a r b y e d .

EP A2'0s1aQ p r o f i t e C E Q ' f s i r d e a f t e r n u s e s p h e l t d f e i f t h  
C i r c u l a r o f r o t u n d a h t e C E Q ' l p - a p p r o v e d e f a e r n u s i l e r o n t a t i v e  
i n c o n s w i i E P A p d s l g u y d a t h b a i t m t e h . E C E Q ' f s i r m a t i i s e d e f  
n a r r o w l y t e n a s i u l h o a r t s e d u n a n s a d e r e a d s l o n f a b o l e o m p l y  
w i t h e r h i s s t a e n d i e c m a s i o m p l w i a t h b o e A A l s t e r a v e s  
i n c e n t a i r v o e i d o a e n x c c e e n s s b i u a t l s p e s a e h n i t g s h r d e r  
r e d u c t i o n i o a p n e c n e a l a t s i u e s t h t e C E Q ' f s i r d e a f t e r n u s e s r u l e  
c o n s i w s i t t e h p e n a l s t y e s s e m e n t i e A A l 3 ( e a ) 8 . 5 A c c o r d i n g l y ,  
E P A s o c t o n s t r a i n e t d u t f o r i t s o n g - s t a n d i n g i n t e r p r e t a t i

B.T.H. ~~MRDC~~ ~~ec~~ ~~iso~~ ~~en~~ ~~at~~ ~~pt~~ ~~cy~~ ~~on~~ ~~me~~ ~~as~~ ~~u~~ ~~s~~ ~~e~~ ~~s~~ .

The RDC Cecil Smith Estate's trust had no intent to transfer the assets to  
 regulate and protect the estate and the RDC had no intent to transfer the assets to  
 determine the estate's liability for the estate's debts and the estate's  
 penalty for the estate's liability for the estate's debts and the estate's  
 EPA Act is in the estate's liability for the estate's debts and the estate's  
 § 301 (a) is in the estate's liability for the estate's debts and the estate's  
 disbursement of the estate's liability for the estate's debts and the estate's  
 explanation of the estate's liability for the estate's debts and the estate's  
 defensible on the estate's liability for the estate's debts and the estate's  
 defensible on the estate's liability for the estate's debts and the estate's  
 EPA Act is in the estate's liability for the estate's debts and the estate's  
 EPA Act is in the estate's liability for the estate's debts and the estate's

C. Statewide courts and the state bar are prohibited from imposing  
 limitations on the number of attorneys admitted to the bar.

A l t h d u e r d c o l d e i x p g l w c t t h h j u l d g s o e n t h a e p p r o f a l  
a f f i r d e a f t e i a s e a s l e p p , A a i s n f e t r h a e l d e o u r e a s o m b r t g  
h o l d i i n t h a d a s a o e k d e a d f i r d e a f t e i v s e o s a s u l n d t e Q r E Q  
r e s p e c t e f u l t h e R A e c o n t s h i e d r s e r r o n i e n o f u e s r e n c e .

[illegible]

Furtherrmore, the Supreme Court has consistently held that the First Amendment's guarantee of free speech and expression is not subject to any "balancing test" or "weighing of interests." *See, e.g.,* *Brandenburg v. Ohio*, 393 U.S. 831, 837 (1969) (holding that the First Amendment protects "every type of expression that may come within the compass of its protection"); *Shelton v. Texas*, 354 U.S. 471, 483 (1957) (holding that the First Amendment protects "the right of every citizen to speak his mind freely on any subject"); *Whitney v. California*, 275 U.S. 419, 427 (1928) (holding that the First Amendment protects "the right of every citizen to speak his mind freely on any subject").

$$^{72} \text{Luminant } \text{Geol. } \text{C.E.P. } \text{Aq. } \text{H. } 3 \text{ d } 8 \text{ 8 } 4 \text{ 1 } (855' 52'' 0.13) .$$

73 4 2U . §S7 4 C 2..

74 ~~NRDCEPA~~ 7.4 P. 3 d 11006535 CG 2r 0.1 4 ).

7. SeCeA § 1 1 3 a ( 3 ) 0 4 ( a )

$$^7rN;RDCEPA7.4F9.3d5150,6n4.(2DCC2r0.14).$$

77 4 21 . §S7 4 00..

78 C A 8 1 1 0 ( a ) C ( 2 e ) m ( p A h ) a d s i e s d ) .

" sloo a g h u e l t i e m f a f o e S t t a d l e d o s e r e i s l i i n o i n t i a s t o i m p a l s c e  
w i t h n e a t i s o t n a n l d a a m d b s i a e i n r h S e t a s e l t i d e o w p h y a t e v e r  
m i o x e m i s l i i n o i n t i a t t e i e n s s u i t t e p l a r t s o u l u a t i o n . "

D A f f i r m e a f f e s s v o e a t l t e D e i s C o u g t h s l s d i c t i o n .

A l t h e R A f f i R a t e n c e l d s a h t a e v e o d a i d s c r i m p d r e m e n t i n  
e m i s s i i n n i s a n t d b o n h e a s u i r d e s s , e h a f f i r m e a f f e s s v e  
e x c e l d i t s c i l o n c a t u h s e y t a j e u r i s o f i l d e i i s o t n o u t t G E Q  
r e q u e P s A t e s s i t d p i o s s i t i o n .

S t a a t e s h b o r i e d y e f e s t m o n e p a n g i l d o i r e s s i w s i t t e t e o f t  
b o C A S 1 B ( a ) ( 3 5 0 ) 4 S a p B D o v l a i a c u h t h o c r i t z e s e t s ,  
a l l a c w o s u t r o t a p a n l a y p p r o p r i a n t a l i t a d e s s ' u e c t i o n  
1 1 3 ( p e r ) o ( v l i ) d a e s u s h t o l i d e t e r t h a i n m o l u e n t p y e n a b l e y  
a s s e s s e i d a l l e r e s s w e s t e m n i e n t h o e n r e p a n g a l t e i e s  
" a p p r o p a d i s t f e r t h l e a m o o p e h a i l a t n i o e s e p a m g i s t y  
a p p r o p m i o a r t e e , c i v i l i e t a l d e p a c h e t e r t h r i a t a e t a r y  
p e n a d m e o a t s p r o p r i e a r S a v P i n o l r a t i o n s .

T h e A A r a n h d e s t o u c u r ' s s o l v e i t d b a f i a c p r s l i c a b l e  
s t a n d l a d r e d t e r m h e i t h g e r a s e a v i o l o a f S i l d P h d e i s t r i c t  
c o m n u t s t e s s a l o b y w h a p e s i t f a i t a s h o s e h a i p t e s  
e m i s s o n p r o g w i a m h i d e i s c r e t i b o y n h e a a n d s e l d t h e  
i n c l o s u r e f i r d e a f t e i n v e e r i s p o e o s n e e t a a n y w i s m c h  
s t a h t a e v s o s e m p l e t m e e n t r i s s o n p r o g W a m e a r . i a d t i o n  
c l a a i n s l e g v e i d l a h S e l P n t , a b t l h s e s l a e s y a m d t c h a e l l e g e d  
v i o l i a s t u i d o g i n e d o u t h t a p p t i f e a s o f s c e a s e h s a t t a n a d r a d  
w h e a r v e i o l i a s t o i u o m n s w d e t t h a e w r a a p d e n a b t t y a e u r t h o r i z e d  
r e l a i p e r f e s c i m i h s e e a d a n t h e P .

O n T e e x f a e s d e o d h t a s p p l t h T e Q E Q f s i r d e a f t e i n v e e u s t  
d e s c r l i b e e d l r a E n e F r u g t H o e d C o g a c . i , t s u f e i n l u a d t e h r e  
C A A t h W e e s t D e i r s n b i e x t a h S e i e C r l r a a b l e g e d a t e o r t a i n  
e m i s l i i n i m t h T e e x S a l s P n d e q u e s i p e d a D e i f e s n a l s a n e t r i t e e d  
T e x a a f s f i r d e a f t e i n v e e s u d r i n d o d t i s n f i o l s a o f k u r i s d i n s t e a d ,  
h o l d a i n g e e r a l a e y n t e j r u i d n g g o e t m t e e r a i f t s o n s i d e a r l a l t i o n  
o f h f e a p t e s e t h o e i d s t o u t t e s b n i e a e f t f i r m a t i w a e s d e f e  
c o n s i w d i e t r h e d f t h d C e i t r e c r u m i i t m ' a s t i i f o a m t o h h a e l l e n g e t o  
E P A a ' p s p r o o f v a t l f h f e i r d e a f t e i n v e e T e e x S a l s P n , t d h c e o u f r o t u n h d a t  
t h T e e x d a e s f e d o s e " n e g a d e i e s t r i c t c o u a s s e s i s v j u l r i s d i c

<sup>79</sup> T r a v i n R D 2 U S 6 0 7 , 9 ( 1 9 7 5 ) .

<sup>80</sup> 8 F e R e 3 8 4 1 3 8 ( 4 B u l r 2 2 , 0 1 5 ) .

<sup>81</sup> I d a . 3 3 8 4 5 .

<sup>82</sup> C A A S 1 3 a ( r e d ) 3 4 0 2 1 ( 3 5 7 ; 4 1 3 a ( n d 6 0 4 ( a ) .

<sup>83</sup> S e e A A S 1 1 3 a ( r e d ) 3 4 0 2 1 ( 3 5 7 ; 4 1 3 a ( n d 6 0 4 ( a ) .

<sup>84</sup> C A A S 3 0 4 2 1 . S s . 7 6 . 0 4 .

<sup>85</sup> S e m e m o r a n d O m d S i r e G r a E n t e F r u g t H o e d C o g a c . 1 , 2 - 1 0 8 , 2 0 1 4  
W L 2 1 5 3 9 W 3 D e M a 2 8 2 , 0 1 4 ) .

<sup>86</sup> L u m i G a m e r G a d L i L o C E P A , 1 4 . 8 4 ( 1 5 C ' i d r 0 . 1 3 ) .



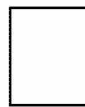
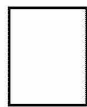
pena us iteher i bert il ä n C A 1 3 ( o e t ) h e t a p e r m i t t i n g  
 a u t h o p r o i w t y o r e s c o v i e r i a l l b i s e i n , p t o v a d d e e f s e u n s d e , r  
 n a r r o w f i c n i e r d u m s i t f a n w b e p e , n a a t a e s e s s e ' s t e n d s  
 d e t e r m i n t a f f e i C i h r c s o o t n b y n d a i n e c , o g b y E 2 A n d t s  
 r e c e e g i o o n n a s l i s t e e m y k i i t i n a g l , s o n s i w s i t t e h e t a t e ' s  
 a u t h o n d e A y 8 1 1 0 .

## RELIER REQUESTED

F o t r h f e o r g r o e i a n s t o C h e s p e r e f u l l A d m i n i s t r a t o r n o t a y t  
 t h R e s t i i t n i o n i n , a d e e e o r i e n c o n s i d e r i e s t i u e n s i n r h a i s s e d  
 P e t i u t n i d e n A o r t h C e A A n s t a m p l e m e n t l a F e i i n a n l l e  
 r e g a r t d e e n g l o s i f o f n i r o n e a f t e i n v e l e T e x S a l s P e n d i n g  
 r e c o n s i d e r a t i o n .

Ma r t 5 2 , 0 1 7

R e s p e c t u f u n l i l t y e d ,



C

:

:



C h a i r m a n

T e x C o m m i s s i o n E n v i r o n m e n t a l l y

<sup>87</sup> / d a t , 8 9 3 ,

CERTIFICATE

I certify that the Coexistence Environment Policy is a  
 Reconsidered Requirement for the following  
 persons and facilities in the following  
 on March 12, 2017.

James Boyd Hudson

Jar BiosHudson  
 At to Emeyi,ronLadnitiabls  
 TexCosmmisossEonirorQueanltiatly  
 TexBar1#0157400

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Wildlife and Ecosystems Branch  
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**Version**

2.1

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*First:* Curt  
*Middle:*  
*Prefix:*  
*Suffix:*

**Formatted Name**

Curt Morgan

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*Region:* TX  
*Postal Code:* 75201  
*Country:*

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DALLAS, TX 75201





prop="blank" size="8"/><fld xmlns="" prop="telcell" align="left" dir="ltr" color="000000" size="8"><label align="right" color="626262">Mobile</label></fld><fld xmlns="" prop="email" align="left" dir="ltr" color="000000" size="8"/><fld xmlns="" prop="addrwork" align="left" dir="ltr" color="000000" size="8"/><fld xmlns="" prop="blank" size="8"/><fld xmlns="" prop="blank" size="8"/><fld xmlns="" prop="blank" size="8"/><fld xmlns="" prop="blank" size="8"/><fld xmlns="" prop="blank" size="8"/><fld xmlns="" prop="blank" size="8"/><fld xmlns="" prop="blank" size="8"/></card>

**X-MS-MANAGER**

Morgan, Curt

**Last Revision**

20170601T151256Z

**Example of Collaborative Work in Environmental Risk Assessment by Toxicology  
Excellence for Risk Assessment (TERA) and the Risk Science Center of the  
University of Cincinnati, College of Medicine**

TERA was founded on the belief that an independent non-profit organization can provide a unique function to protect human health by conducting scientific research and development on risk issues in a transparent and collaborative fashion. One-third of TERA/RSC effort has been for industries; 2/3 has been for government groups. The projects below are examples of this transparent and/or collaborative work.

**CPSC: Draft Final Rule <sup>1</sup>**

Toxicology Excellence for Risk Assessment (TERA) and the Risk Science Center of the University of Cincinnati, College of Medicine are contractors to the Consumer Products Safety Commission. Below is a recent public exchange that might warrant the EPW committee attention.

Public Comment 16: A commenter states that the contractor (TERA) engaged by the CPSC to study phthalate use and investigate the presence of phthalates in four specified plastics may have a conflict of interest. The commenter notes TERA's past litigation support for regulated industries. The commenter asserts TERA's potential conflict of interest is exemplified in a 2016 paper sponsored by a chemical manufacturers' trade group.

The commenter adds that TERA is a founding member of the Alliance for Risk Assessment (ARA). The ARA's Standing Panel includes the TERA founder, two industry consultants, employees of Dow Chemical and ExxonMobil, and two government employees. The commenter alleges that, in light of TERA's relationship with ExxonMobil, TERA's conclusions should be viewed with caution.

CPSC Response 16: We consider TERA to be an independent organization that focuses on advancing the science of toxicology and risk assessment. We do not agree that work by TERA or individual TERA staff in scientific projects, workshops, or publications concerning industrial chemicals or products or that include chemical firms, industry employees, or trade organizations necessarily indicates unreliable performance or improper influence in CPSC contract work.

As standard procedure, CPSC reviews potential conflicts of interest before awarding a contract or task order. We did not identify any conflicts for TERA related to the investigation of the production and use of phthalates or the production of the specified plastics. We do not agree that the membership in ARA is evidence of a potential conflict of interest. Rather, we consider ARA to be a transparent, multi-stakeholder scientific collaboration to develop risk assessment information to advance public health activities. Furthermore, the commenter does not specify any projects by the ARA that suggest that

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<sup>1</sup> Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates: Determinations Regarding Certain Plastics, 8-26-17.

the contracted TERA work is affected by potential conflicts of interest.

### **Alachlor and Acetochlor <sup>2</sup>**

Claim: Dourson sought to undermine drinking water standards for the breakdown products of alachlor and acetochlor, two herbicides manufactured by Dow and Monsanto.

Reality:

1. TERA was approached by DowAgro Sciences and Monsanto to develop Reference Doses (RfDs) for degradates of these pesticides.
2. Michael Dourson talked with senior US EPA leaders to determine their interest.
3. EPA stated that they had developed RfDs for the parent chemicals and did not consider the degradates to be more toxic.
4. Michael Dourson suggested that DowAgro Sciences and Monsanto petition the Alliance for Risk Assessment (ARA) for their review.
5. The ARA Steering Committee endorsed a collaborative approach.
6. TERA formed a team of risk assessment scientists from 3 states and the EPA to develop these RfDs. COIs statements were developed and reviewed at the meeting.
7. The meeting was open to the public.
8. The results were described in a report available to the public and in a publication.

### **1-Bromopropane <sup>3</sup>**

Claim: TERA proposed a weaker standard for 1-bromopropane, a solvent used in degreasers, aerosol solvents, spray adhesives and dry cleaning.

Reality:

1. In 2004, occupation limits for 1-bromopropane differed by 16-fold.
2. TERA critically evaluated the underlying information and recommended an OEL of 20 ppm based on effects in newborns.
3. TERA's value was lower (i.e., safer) than EPA's.
4. An NTP study was conducted after the TERA assessment showing cancer findings.
5. New evaluations based on the cancer suggested lower limits.

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<sup>2</sup> Source:

- <http://www.tera.org/ART/Degradates/index.html>;
- Gadagbui, B; Maier, M; Dourson, M; Parker, A; Willis, A; Christopher, JP; Hicks, L; Ramasany, S; Roberts, SM. 2010. Derived Reference Doses (RfDs) for the Environmental Degradates of the Herbicides Alachlor and Acetochlor: Results of an Independent Expert Panel Deliberation. Regulatory Toxicology and Pharmacology 57:220-234.

<sup>3</sup> <http://www.tera.org/Publications/TERA%20Analysis%20of%20OELs%20for%201-Bromopropane.pdf>.

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6. If confirmed, I will work with other federal agencies to develop a scientifically defensible position on this chemical under the LCSA.

### **Chlorpyrifos**<sup>4</sup>

Claim: Michael Dourson argued that chlorpyrifos was safe, despite three major studies showing that mothers and children who consume it are more at risk of giving birth to kids with ADHD and other neurological problems.

Reality:

1. TERA was funded by Dow Agro Sciences to review the Reference Dose (RfD) developed by the EPA and others; results were published in 2005 and 2006.
2. The science for chlorpyrifos has progressed since the time of these publications.
3. One epidemiology study shows associations of neurological effects at exposures lower than the current RfD; other studies do not show this association.
4. Based on how chlorpyrifos works this association is not expected.
5. The raw data from this epidemiology study are not available for review.
6. If confirmed, I will work with investigators of this study to obtain these raw data, and will work with epidemiologists within EPA and other organizations to incorporate new information so that public health is protected.

### **Diacetyl**<sup>5</sup>

Claim: TERA sought to weaken standards for diacetyl, a chemical added to food and other products for flavor and aroma.

Reality:

1. At the time of TERA's work no standards existed for worker protection.
2. TERA's standard published in 2010 (i.e., range from 70 to 200 ppb) was based on the best science at the time, through careful consideration of toxicology, epidemiology, and background exposures.
3. Subsequent analyses published by various organizations include standards of 5 to 20 ppb based on different emphasis on toxicology and epidemiology data.
4. TERA is continuing its ongoing relationship with NIOSH since 2010 through an Interagency Personnel Agreement Fellowship.

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<sup>4</sup> Source:

- Zhao, Q., B. Gadagbui and M. Dourson. 2005. Lower birth weight as a critical effect of Chlorpyrifos: A comparison of human and animal data. *Reg. Toxicol. Pharmacol.* 42:55-63.
- Zhao, Q., M. Dourson and B. Gadagbui. 2006. A Review of the Reference Dose (RfD) for Chlorpyrifos. *Reg. Toxicol. Pharmacol.* 44:111-124.

<sup>5</sup> Maier, AM; Kohrman-Vincent, M; Parker, A; Haber, LT. (2010) Evaluation of concentration-response options for diacetyl in support of occupational risk assessment. *Reg. Toxicol. and Pharmacol.* 58(2): 285-296.



5. This ongoing close relationship with TERA-NIOSH suggests that it finds TERA's work scientifically credible.

### **1,4-Dioxane <sup>6</sup>**

Claim: TERA sought to dramatically weaken the safety standard for 1,4-dioxane, an industrial chemical used in chemical processing.

Reality:

1. Dioxane occurs naturally in foods (up to 15 ppb in dairy products).
2. Dioxane causes cancer at high doses, but EPA's IRIS peer review panel thought that a nonlinear assessment might be appropriate.
3. Kentucky petitioned the Alliance for Risk Assessment to work collaboratively; 4 other states joined a request to the government of Japan, US NTP had previously helped.
4. Two publications resulted and support the EPA IRIS panel's nonlinear suggestion.
5. All of this information has been publicly available.
6. Health Canada is using TERA's collaborative work in their evaluation of dioxane.
7. If confirmed, I will work with other EPA offices to incorporate new information so that public health is protected.

### **Flame Retardants <sup>7</sup>**

Claim: Dourson served on Science Advisory Council of the North American Flame Retardant Alliance and co-wrote an article about the flame retardant chemical tetrabromobisphenol A, or TBBPA, casting doubt on whether the flame retardant has reproductive, neurological or development effects.

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<sup>6</sup> Source:

- Nishimura et al., 2004. Study of 1,4-dioxane intake in the total diet using the market-basket method. *Journal of Health Science* 50:101-107.
- Dourson, M; Reichard, J; Nance, P; Burleigh-Flayer, H; Parker, A; Vincent, M; McConnell, EE; (2014). Mode of Action Analysis for Liver Tumors from Oral 1,4-Dioxane Exposures and Evidence-Based Dose Response Assessment. *Reg. Toxicol. Pharmacol. Volume 68, Issue 3*, April 2014, Pages 387-401
- Michael L. Dourson, Jeri Higginbotham, Jeff Crum, Heather Burleigh-Flayer, Patricia Nance, Norman D. Forsberg, Mark Lafranconi, John Reichard. 2017. Update: Mode of action (MOA) for liver tumors induced by oral exposure to 1,4-dioxane. *Regulatory Toxicology and Pharmacology* 88:45-55.
- Website is currently in transfer mode. For current version see: <http://med.uc.edu/eh/centers/rsc/risk-resources/ara>.

<sup>7</sup> Cope, Rhian B., Sam Kacew, Michael Dourson. 2015. A reproductive, developmental and neurobehavioral study following oral exposure of tetrabromobisphenol A on Sprague-Dawley rats. *Toxicology* 329 (2015) 49-59.

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Reality:

1. Flame retardants save lives and property in innumerable situations. Countless examples exist of damage to property and lives lost when such chemicals are not available.
2. The Science Advisory Council of the NAFRA recommended publishing toxicology studies on several flame retardant chemicals so that the information was more publicly available, since current studies had been submitted to EPA in a confidential manner.
3. The publication on TBBPA showed no human relevant effects even at the highest dose used. This information can be used along with other toxicology studies to determine EPA's Reference Dose (RfD) for this chemical, which will then allow its regulation.
4. Michael Dourson worked with NAFRA so that this study, and all of its raw data, could be sent to the US NIEHS for their deliberation on whether to conduct a replicate study, thus potentially saving the US government about a million dollars.

**Kids Chemical Safety website <sup>8</sup>**

Claim: Michael Dourson's TERA was given money by industry to create a misleading website on chemical safety for children.

Reality:

1. Stories on this kids website are written by identified experts for parents in an easier to understand way, since government websites are data-dense and activist websites appear designed for fundraising.
2. Experts are from Cincinnati Children's Drug & Poison Information Center, Harvard Superfund Research Program, NSF International, and Toxicology Excellence for Risk Assessment (TERA).
3. TERA received cash gifts from the Alliance for Risk Assessment (ARA), American Chemistry Council (ACC), Combined Federal Campaign (CFC) of the US Federal Government, and the public.
4. Another nonprofit organization is reviewing this website for adoption.

**MCHM-West Virginia <sup>9</sup>**

Claim: Michael Dourson did not disclose a conflict of interest prior to chairing this panel meeting.

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<sup>8</sup> Source:

<http://web.archive.org/web/20161031132803/http://kidschemicalsafety.org/health/about/>

<sup>9</sup> Report of Expert Panel Review of Screening Levels for Exposure to Chemicals from the January 2014 Elk River Spill. West Virginia Testing Assessment Project, May 5, 2014.

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Reality:

1. As for all of TERA's peer review meetings a COI disclosure was done prior to the meeting and commented on by all panel members.
2. This disclosure was part of the panel report.
3. West Virginia requested a closed review meeting, so such disclosures were not publicly available until the time of the press release the day after the meeting.
4. The Dourson-lead panel recommended the level of MCHM (4-methyl-1-cyclohexanemethanol) to be 8-fold more protective.
5. All of this information has been publicly available.

**Peer Review**<sup>10</sup>

Claim: Over 50% of TERA's peer reviews are for industry. TERA whitewashes industry risk assessment values and places them on websites with other government information.

Reality:

1. Over 50% of TERA public peer review meetings were for governments.
2. Over 99% of TERA letter peer reviews were for governments.
3. All members of TERA's peer review panels were vetted for COI and balance was maintained among scientific disciplines and sector representation.
4. The panels decide whether information is sufficiently credible to load on the website.
5. The EPA IG (2009) commented favorably on TERA's peer review process, including its COI disclosures, COI updates at the meeting, and its documentation of COI in panel reports.
6. TERA is the only group to document COI decisions in its reports out of 6 groups reviewed by the EPA IG, including EPA's IRIS and the National Academy of Sciences.

**Perchlorate**<sup>11</sup>

Claim: Michael Dourson's TERA was supported and paid to bless a high level of the rocket fuel perchlorate found at numerous sites around the country.

Reality:

<sup>10</sup> Source:

- <http://www.tera.org/Peer/MeetingReports/index.html>
- U.S. Environmental Protection Agency. 2009. Office Of Inspector General. EPA Can Improve Its Process For Establishing Peer Review Panels. Report No. 09-P-0147. April 29.

<sup>11</sup> Source: Strawson, J., Q. Zhao and M. Dourson. 2004. Reference dose for perchlorate based on thyroid hormone change in pregnant women as the critical effect. Reg. Tox. Pharm. 39: 44-65.

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1. In 1995, PSG hired TERA to develop a safe dose, after EPA rejected PPG's level.
2. TERA developed a safe dose that was 100-fold lower (more protective), and recommended peer review.
3. The peer review recommended additional studies, which probably cost over 10 million dollars.
4. Afterwards EPA and the DOD disagreed on the safe dose.
5. TERA independently made its safe dose 5-fold more protective and published it.
6. The NAS also developed a safe dose, which was 25 times higher than EPA's, 12-fold lower than DoD's, but within 3 fold of TERA's value.
7. If confirmed, I will work with other EPA offices to incorporate new information so that public health is protected.

### **Petcoke-Chicago**<sup>12</sup>

Claim: Michael Dourson's TERA was supported by Koch industries to bless a petcoke storage facility in Chicago.

Reality:

1. The citizens of Chicago can make any risk management decision they desire regarding exposures to chemicals from any industry in their city.
2. TERA lead a team of scientists to determine exposures to petcoke in appropriate neighborhoods in Chicago.
3. Modeled exposures were compared to EPA's PM<sub>10</sub> NAAQS.
4. The work was published, allowing citizens of Chicago to consider these results in their risk management decision.

### **PFOA-Dupont**<sup>13</sup>

Claim: Michael Dourson's TERA was hand picked by Dupont and paid to bless a high level of PFOA in water in West Virginia.

Reality:

1. In 2002, 4 governments and one industry recommended TERA as the independent and neutral party to assist in a PFOA evaluation. A West Virginia judge agreed.
2. TERA, unaware of this agreement, was hired by the State of West Virginia.
3. Dr. Deanne Statts of West Virginia DEP chaired a 10-member scientific panel.
4. Five panelists were government employees; 3 were from EPA.
5. The panel made a unanimous determination of a safe water level of 150 ppb.
6. All of this information has been publicly available.

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<sup>12</sup> Dourson, Michael, Chinkin, Lyle, MacIntosh, D.L., Finn, Jennifer, Brown, Kathleen, Reid, Stephen, Martinez, Jeanelle. 2016. A Case Study of Potential Human Health Impacts from Petroleum Coke Transfer Facilities. Journal of the Air & Waste Management Association May. DOI: [10.1080/10962247.2016.1180328](https://doi.org/10.1080/10962247.2016.1180328)

<sup>13</sup> Source: FINAL CATT REPORT WITH ATTACHMENTS, AUGUST 2002



7. The science of PFOA has progressed since 2002.
8. If confirmed, I will work with other EPA offices to incorporate new information so that public health is protected.

### **Regulatory Toxicology and Pharmacology Journal**<sup>14</sup>

Claim: Michael Dourson publishes extensively in this journal, a mouthpiece of industry.

Reality:

1. This journal is unique in that it publishes papers that integrate toxicology and pharmacology findings into risk assessment and regulatory positions.
2. Because of this, many scientists from around the world publish in it.
3. My two most cited papers were in this journal.
4. I wrote these two papers as a US EPA employee.

### **Tobacco**<sup>15</sup>

Claim: Michael Dourson is a shill for the tobacco industry.

Reality:

1. TERA's work in tobacco has been previously described in a 2015 hearing of the U.S. House Committee on Science, Space, and Technology.
2. The total tobacco money received by TERA in 21 years was ~\$12,635.
3. Approximately \$6,000 was for a study on distribution of environmental tobacco smoke (ETS)-related chemicals for nonsmoking workers.
4. Approximately \$6,000 of this was for seminars on EPA's chemical mixtures risk assessment guidelines.
5. \$550 was for the development of a benchmark dose (BMD) for an ETS constituent, since the industry did not know how to use this new EPA method.
6. \$85 was for coping papers on work related to EPA's IRIS nickel document.

### **Trichloroethylene (TCE)**<sup>16</sup>

<sup>14</sup> <https://scholar.google.com/citations?user=N3DABAQAAAAJ&hl=en>

<sup>15</sup> Response to Questions from U.S. House Committee on Science, Space, and Technology on EPA's 2015 Ozone Standard: Concerns Over Science and Implementation, Thursday, November 5, 2015.

<sup>16</sup> Source:

- Michael Dourson, Bernard Gadagbui, Rod Thompson, Edward Pfau, and John Lowe. 2016. Managing Risks of Noncancer Health Effects at Hazardous Waste Sites: A Case Study Using the Reference Concentration (RfC) of Trichloroethylene (TCE). *Regulatory Toxicology and Pharmacology* 80:125-133.
- <http://web.archive.org/web/20161031132803/http://kidschemicalsafety.org/health/about/>

Claim: Michael Dourson's TERA was hand picked by ACC and paid to bless a high level of TCE at superfund sites around the country.

Reality:

1. The Alliance for Risk Assessment (*ARA*) was petitioned by the Alliance for Site Closures to review noncancer toxicity of TCE.
2. The Steering Committee of the *ARA*, composed primarily of government officials, asked the collaboration to focus instead on building range in risk values.
3. The collaboration team had 6 conference calls, including scientists from Australia, 3 webinars, one of which included over 400 folks, and 1 independent peer consultation.
4. The team gave 8 presentations, and wrote one publication.
5. The team is planning training sessions with US states.
6. All of this information has been publicly available.
7. If confirmed, I will work with other EPA offices to incorporate new information so that public health is protected.



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March 20, 2017

**VIA ELECTRONIC MAIL**

The Honorable Scott Pruitt  
Administrator  
U.S. Environmental Protection Agency  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N.W.  
Mail Code 1101A  
Washington, DC 20460

**PETITION OF THE NAAQS IMPLEMENTATION COALITION TO THE ADMINISTRATOR OF THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY FOR ADMINISTRATIVE  
RECONSIDERATION OF PORTIONS OF THE FINAL RULE ENTITLED “REVISIONS TO THE  
GUIDELINE ON AIR QUALITY MODELS: ENHANCEMENTS TO THE AERMOD DISPERSION  
MODELING SYSTEM AND INCORPORATION OF APPROACHES TO ADDRESS OZONE AND FINE  
PARTICULATE MATTER”**

**82 Fed. Reg. 5182 (Jan. 17, 2017)  
EPA-HQ-OAR-2015-0310**

Administrator Pruitt:

Enclosed, please find from the National Ambient Air Quality Standards (“NAAQS”) Implementation Coalition a Petition for Reconsideration of portions of the final rule of the United States Environmental Protection Agency entitled “Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches to Address Ozone and Fine Particulate Matter,” 82 Fed. Reg. 5182 (Jan. 17, 2017). A copy of this petition has also been electronically mailed to the Air and Radiation Docket for filing in EPA docket number EPA-HQ-OAR-2015-0310.

Please contact me if you have any questions regarding this petition.

ATLANTA AUSTIN BANGKOK BEIJING BRUSSELS CHARLOTTE DALLAS HOUSTON LONDON LOS ANGELES  
McLEAN MIAMI NEW YORK NORFOLK RALEIGH RICHMOND SAN FRANCISCO TOKYO WASHINGTON  
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The Honorable Scott Pruitt  
March 20, 2017  
Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph C. Stanko, Jr.", written over the word "Sincerely,".

Joseph C. Stanko, Jr.  
*Counsel for the  
NAAQS Implementation Coalition*

Attachment

cc: EPA Air and Radiation Docket  
Ryan Jackson, Chief of Staff  
Sarah Dunham, Acting Assistant Administrator, Office of Air and Radiation  
Steve Page, Director, Office of Air Quality Planning and Standards (OAQPS)  
Chet Wayland, Director, Air Quality Assessment Division, OAQPS  
Tyler Fox, Leader, Air Quality Modeling Group, OAQPS  
George Bridgers, Director, Model Clearinghouse, OAQPS

**BEFORE THE ADMINISTRATOR OF THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches to Address Ozone and Fine Particulate Matter; Final Rule. 82 Fed. Reg. 5182 (Jan. 17, 2017)**

Docket No. EPA-HQ-OAR-2015-0310

**PETITION OF THE NAAQS IMPLEMENTATION COALITION FOR  
RECONSIDERATION OF PORTIONS OF THE FINAL RULE**

The National Ambient Air Quality Standards (“NAAQS”) Implementation Coalition<sup>1</sup> hereby petitions the Administrator of the United States Environmental Protection Agency (the “Administrator,” “EPA” or the “Agency”) to reconsider portions of the final rule referenced above.<sup>2</sup> That rule – the “Final Appendix W Rule” – was published in the *Federal Register* on January 17, 2017, 82 Fed. Reg. 5182, with an effective date of May 22, 2017.

The Final Appendix W Rule promulgates revisions to the *Guideline on Air Quality Models*, 40 C.F.R. part 51, appendix W (“Appendix W”), which lists EPA’s preferred models and recommended modeling techniques and serves as guidance for the use of air quality modeling in estimating ambient concentrations of air pollutants. Many parts of the Final Appendix W Rule provide needed improvements to EPA-preferred models, and we strongly support such improvements.

We are concerned, however, with specific provisions of the Final Rule, some of which appeared for the first time in the Final Appendix W Rule, and, thus were not previously available for comment. The remainder of this petition provides an overview of our concerns, which are of central relevance to the Final Appendix W Rule. We intend to file a more-detailed supplement to this petition at a later date that will expound further on our concerns.

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<sup>1</sup> The NAAQS Implementation Coalition includes trade associations, companies, and other entities that confront challenges in permitting and operating facilities under increasingly-stringent NAAQS, including those for ozone and PM<sub>2.5</sub>. It is our experience that addressing these challenges is critical to fostering economic expansion, creating jobs in manufacturing and other economic sectors, and generating needed tax revenue for local communities throughout the country.

<sup>2</sup> This petition is filed pursuant to section 4(d) of the Administrative Procedure Act, 5 U.S.C. § 553(e), and, to the extent it may be applicable and relevant, section 307(d)(7)(B) of the Clean Air Act, 42 U.S.C. § 7607(d)(7)(B).

## OBJECTIONS

### Single-Source Photochemical Grid Modeling for Ozone and PM<sub>2.5</sub> Precursors

The Final Appendix W Rule establishes a new requirement that, in the absence of a screening analysis that results in a source being exempt from conducting and reporting the results of air quality modeling, applicants seeking prevention of significant deterioration (“PSD”) permits must model impacts on ambient air quality of their emissions of precursors to ozone and PM<sub>2.5</sub> using a “chemical transport model” such as a photochemical grid model or a suitable Lagrangian model.<sup>3</sup> EPA does not, however, specify a preferred model for this purpose.<sup>4</sup> We believe that the current state of modeling technology does not support this requirement.

Although the Clean Air Act requires applicants for PSD permits to provide “an analysis of air quality,”<sup>5</sup> and that the Administrator “specify with reasonable particularity each air quality model or models to be used” for this analysis,<sup>6</sup> EPA long recognized that “it was not technically sound to designate with particularity specific models to be used to assess the impacts of a single source of ozone” or PM<sub>2.5</sub> and, instead, allowed a permit applicant, working with the permitting authority, to choose a “method” to conduct the required air quality analysis.<sup>7</sup> Despite evaluation, as requested by the Sierra Club, of whether “to designate air quality models for ozone and fine particles (PM<sub>2.5</sub>) for use by all major sources applying for a prevention of significant deterioration (PSD) permit,”<sup>8</sup> EPA concluded that it could not make such designations.<sup>9</sup> EPA should, therefore, have retained the existing requirements applicable to sources emitting precursors of ozone and PM<sub>2.5</sub>.

Although photochemical grid modeling may often be capable of characterizing “[t]he complex chemistry of ozone and secondary formation of PM<sub>2.5</sub>,”<sup>10</sup> EPA recognizes that it remains the case that no single model will be most appropriate for “the diversity in chemical and physical environments across the United States.”<sup>11</sup> Selection, justification, and use of a chemical transport model for a specific PSD permit application will be both time-consuming and expensive. Indeed, it could be cost-prohibitive, particularly for smaller sources.<sup>12</sup>

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<sup>3</sup> 82 Fed. Reg. at 5213 (to be codified at 40 C.F.R. Part 51, Appendix W 5.3.2(c)).

<sup>4</sup> *Id.* at 5193.

<sup>5</sup> Clean Air Act § 165(e)(3)(B), 42 U.S.C. § 7475(e)(3)(B).

<sup>6</sup> *Id.* at (e)(3)(D).

<sup>7</sup> Letter from Gina McCarthy, Assistant Adm’r, Office of Air and Radiation, EPA, to Mr. Robert Ukeiley 2 (Jan. 4, 2012).

<sup>8</sup> *Id.* at 1.

<sup>9</sup> *Id.* at 2.

<sup>10</sup> *Id.*

<sup>11</sup> 82 Fed. Reg. at 5193.

<sup>12</sup> *See, e.g.,* NAT’L. ASS’N. OF CLEAN AIR AGENCIES, PM<sub>2.5</sub> MODELING IMPLEMENTATION OF PROJECTS SUBJECT TO NATIONAL AMBIENT AIR QUALITY DEMONSTRATION REQUIREMENTS PURSUANT TO NEW SOURCE



What EPA has done, however, is to effectively eliminate the alternative that previously existed of exploring other methods for analyzing the impact of a proposed source on air quality. Although few alternatives may exist, a permit applicant should be free to explore them, as they have in the past.

This is important because, as noted in 2015 by the Interagency Workgroup on Air Quality Modeling Phase 3 (“IWAQM 3”), “at this time, it is not clear that a robust reduced form model exists for either O<sub>3</sub> or secondary PM<sub>2.5</sub> for the purpose of assessing single source downwind impacts of these pollutants.”<sup>13</sup> There have been no significant technical advances in ozone and PM<sub>2.5</sub> precursor modeling since that 2015 report. Nevertheless, EPA announced in its Response to Comments for the Final Appendix W Rule that it was revising IWAQM 3 to note the existence of screening tools like Model Emission Rates for Precursors (“MERPs”).<sup>14</sup> Draft guidance on development of MERPs for ozone and PM<sub>2.5</sub> was not available, however, until after the Final Appendix W Rule was published. In any case, we do not find MERPs to be “robust,” as that screening method still requires further development. The draft guidance outlining MERPs does not, at this point, provide justification for the new approach to air quality analysis of sources of precursors to ozone and PM<sub>2.5</sub> included in the Final Appendix W Rule.

Therefore, EPA should return to its long-standing prior approach to air quality analysis to support PSD application for sources that emit precursors to these pollutants. At a minimum, the Agency should adopt a moratorium on single-source precursor modeling of at least three years to further develop cost-effective models and screening techniques. EPA can reevaluate the state of technology at the close of that period to determine whether the moratorium should continue.

### **Low-Wind Speed Over-Prediction**

The prior regulatory-default versions of AERMOD and the associated AERMET meteorological model significantly over-predict short-term ambient pollution levels at low wind speeds, as shown by peer-reviewed model evaluation studies.<sup>15</sup> We appreciate that EPA has recognized and sought to address this deficiency in its preferred AERMOD modeling

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REVIEW 2-5, Jan. 7, 2011 (“[I]t is recognized that photochemical grid models can be resource intensive and require special expertise. As such, it is anticipated that this method will be used mostly for large emitting sources.”).

<sup>13</sup> EPA, INTERAGENCY WORKGROUP ON AIR QUALITY MODELING PHASE 3 SUMMARY REPORT: NEAR-FIELD SINGLE SOURCE SECONDARY IMPACTS 3-4, EPA-454/P-15-002, July 2015.

<sup>14</sup> EPA, RESPONSE TO COMMENTS ON THE REVISIONS TO THE GUIDELINE ON AIR QUALITY MODELS: ENHANCEMENTS TO THE AERMOD DISPERSION MODELING SYSTEM AND INCORPORATION OF APPROACHES TO ADDRESS OZONE AND FINE PARTICULATE MATTER 51-52, EPA Docket No. EPA-HQ-OAR-2015-0310-0156 (Dec. 20, 2016) (hereinafter the “Final Appendix W Rule Response to Comments”).

<sup>15</sup> See, e.g., BOB PAINE, JEFFRY CONNORS, AND CARLOS SZEMBEK, AERMOD LOW WIND SPEED EVALUATION STUDY: RESULTS AND IMPLEMENTATION, Paper 2010-A-631-AWMA, 2010 (presented at the 103rd Annual Conference and Exhibition of the Air & Waste Management Association).

system.<sup>16</sup> However, the revision that EPA has adopted has not been the subject of public comment. Indeed, we have concerns that the Final Appendix W Rule insufficiently addresses AERMOD's acknowledged excessively high predictions.

### ***LOWWIND***

EPA had proposed to incorporate an AERMOD option called LOWWIND3 to address excessively high predicted pollutant concentrations under low wind speed conditions.<sup>17</sup> According to EPA, "[t]he majority of commenters supported the EPA's proposal to incorporate the LOWWIND3 option into the regulatory version of AERMOD because they believed it would provide a more realistic treatment of low wind situations and reduce the potential for overprediction of the current regulatory version of AERMOD for such conditions."<sup>18</sup> However, "one commenter indicated that the proposed LOWWIND3 option in AERMOD will 'reduce model accuracy' . . . ."<sup>19</sup> Citing modeling from this lone commenter, EPA did not include LOWWIND3, or its industry-supported predecessors, LOWWIND1 and LOWWIND2, as options in the revised regulatory default version of AERMOD.<sup>20</sup> This modeling could not have been addressed during the comment period. Other modeling, however, continues to demonstrate the suitability of the LOWWIND options.<sup>21</sup> EPA should promptly make LOWWIND3 an approved Guideline option for AERMOD through the Model Clearinghouse and work to specify through an Appendix W rulemaking when its use would be appropriate.

### ***ADJ\_U\****

The Final Appendix W Rule asserts that "EPA is adopting the proposed ADJ\_U\* option in AERMET as a regulatory option."<sup>22</sup> We appreciate that EPA has done so. However, EPA has effectively confirmed that it has, in fact, adopted a revised, more conservative, version of ADJ\_U\* in AERMET than had been proposed.<sup>23</sup>

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<sup>16</sup> 82 Fed. Reg. 5185 (noting "issues with AERMOD model tendency to overprediction from some sources under stable, low wind speed conditions.").

<sup>17</sup> *Id.*

<sup>18</sup> *Id.* at 5187.

<sup>19</sup> *Id.* at 5187-5188.

<sup>20</sup> *Id.* at 5188.

<sup>21</sup> See, e.g., Bob Paine, Olga Samani, Mary Kaplan, Eladio Knipping, and Naresh Kumar, *Evaluation of Low Wind Modeling Approaches for Two Tall-Stack Databases*, 65 J. AIR & WASTE MGMT. ASS'N. 1341 (Mar. 2015); BOB PAINE, CHRISTOPHER WARREN, AND OLGA SAMANI, AERMOD LOW WIND SPEED IMPROVEMENTS: STATUS REPORT AND NEW EVALUATIONS, Paper # 935, 2016 (presented at the 109th Annual Conference and Exhibition of the Air & Waste Management Association).

<sup>22</sup> 82 Fed. Reg. 5187.

<sup>23</sup> E-mail from Rick Gillam, Env't'l Engineer/Air Modeler, EPA Region 4, EPA, to State and Local Modelers (Jan. 4, 2017, 10:28 EST) (on file with author).

Since the Final Appendix W Rule's release, EPA has made additional changes to ADJ\_U\*.<sup>24</sup> Commenters clearly were unable to comment on all changes to ADJ\_U\* made since its proposal. Furthermore, the proposed version of ADJ\_U\* appears to have undergone more testing than the version(s) that EPA has subsequently adopted. That testing showed that it performed well. EPA should reconsider adopting the proposed version of ADJ\_U\* as regulatory-default.

### **Overloading of Model Clearinghouse**

The Final Appendix W Rule finalizes requirements for formal consultation with the Modeling Clearinghouse and documentation of that consultation whenever an alternative model is used.<sup>25</sup> This requirement will encumber applicants seeking PSD permits. Revisions to Appendix W will increase the number of instances in which the Model Clearinghouse would be required to concur.

For example, EPA has ended the designation of CALPUFF as the regulatory default model for long-range transport, but has not replaced it. As a result, written Model Clearinghouse approval will be required each and every time modeling of long-range transport is performed.<sup>26</sup> As we have previously noted, this can be a time-consuming process.<sup>27</sup>

Although EPA says that the average response time by the Model Clearinghouse to requests it received during the pendency of the Appendix W Rule was 28 days,<sup>28</sup> that figure is misleading. It does not take into account the time that precedes a formal request for Model Clearinghouse approval, which can be considerable. Nor is this process even certain. Notably, two projects went all the way through the alternative model process, obtaining approval from EPA Regional Offices and concurrence from the Model Clearinghouse to use ADJ\_U\* version 15181, only to have EPA recently announce in a "clarification memo" that such modeling results "would be unreliable."<sup>29</sup>

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<sup>24</sup> *Id.*

<sup>25</sup> *Id.* at 5197 (to be codified at 40 C.F.R. Part 51, Appendix W 3.2.1(b)).

<sup>26</sup> However, we recognize that CALPUFF can be used as a screening model without Model Clearinghouse approval. 82 Fed. Reg. 5195 (to be codified at 40 C.F.R. Part 51, Appendix W 4.2.1).

<sup>27</sup> NAAQS IMPLEMENTATION COAL., COMMENTS ON EPA'S "REVISION TO THE GUIDELINE ON AIR QUALITY MODELS: ENHANCEMENTS TO THE AERMOD DISPERSION MODELING SYSTEM AND INCORPORATION OF APPROACHES TO ADDRESS OZONE AND FINE PARTICULATE MATTER: PROPOSED RULE" 8, EPA Docket No. EPA-HQ-OAR-2015-0310-0142, Oct. 27, 2015 (citing EPA, MODEL CLEARINGHOUSE: OPERATIONAL PLAN 20 (revised May 1998)) ("Given that written responses from the Model Clearinghouse could take up to four weeks or longer, we would expect that the concurrence memorandum for alternative models proposed in the Appendix W Revision Proposal will require more documentation and take more time than is presently the case.").

<sup>28</sup> Final Appendix W Rule Response to Comments at 87.

<sup>29</sup> Letter from Richard A. Wayland, Div. Dir., Air Quality Assessment Div., EPA, to Reg'l. Air Div. Dir's. 1-10, Clarification on the AERMOD Modeling System Version for Use in SO<sub>2</sub> Implementation Efforts and Other Regulatory Actions 2-3 (Mar. 8, 2017).

EPA should make the approval process more efficient, rather than add additional red tape to the process. One way to achieve this would be to allow permitting agencies – frequently individual states – to determine which model should be used in instances where EPA has been unable to specify a preferred one. This would promote creative thinking about new modeling approaches and enhance the partnership between states and the federal government in implementing the Act.

### **NO<sub>2</sub> Tier 2 Ambient Ratio Method**

The version of the NO<sub>2</sub> Tier 2 Ambient Ratio Method (“ARM2”) adopted in the Final Appendix W Rule was modified from the original tool in a way that makes ARM2 unnecessarily conservative.<sup>30</sup> While even the revised ARM2 tool represents an improved Tier 2 screening method to model NO<sub>2</sub>, EPA should approve use of the original ARM2.

### **Probabilistic Modeling**

Because tighter margins between background pollutant concentrations and increasingly-stringent NAAQS make it increasingly difficult to demonstrate compliance using overly-conservative modeling assumptions that are increasingly obsolete, EPA should adopt more probabilistic approaches to modeling. For example, modeling should be allowed to take into account the variability of both background air quality and emission rates for modelled sources. While commenters suggested this approach to EPA during consideration of the Final Appendix W Rule,<sup>31</sup> EPA declined to take such action.<sup>32</sup>

### **CONCLUSION**

Because these objections address matters of central relevance to the Final Appendix W Rule, we request that the Administrator partially reconsider it, and revise it in light of the new information herein as well as that to be included in our supplement to this petition. We appreciate your attention to this matter and hope to foster an effective dialogue with EPA as the regulated community continues to face implementation challenges under increasingly more-stringent NAAQS. To that end, we look forward to working with EPA to identify improvements to the Final Appendix W Rule that accomplish efficient NAAQS implementation.

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<sup>30</sup> See 82 Fed. Reg. 5189 (noting that “national default model inputs need to be conservative, in line with the CAA’s objective to prevent potential NAAQS violations.”).

<sup>31</sup> See AM. FOREST & PAPER ASSOC. AND AM. WOOD COUNCIL, COMMENTS ON EPA’S “REVISION TO THE GUIDELINE ON AIR QUALITY MODELS: ENHANCEMENTS TO THE AERMOD DISPERSION MODELING SYSTEM AND INCORPORATION OF APPROACHES TO ADDRESS OZONE AND FINE PARTICULATE MATTER: PROPOSED RULE” 15-18, EPA Docket No. EPA-HQ-OAR-2015-0310-0141, Oct. 27, 2015 (discussing variable emissions).

<sup>32</sup> Final Appendix W Rule Response to Comments at 91.

**Senate Committee on Environment & Public Works**  
**Hearing entitled, “Hearing on the Nominations of Michael Dourson, Matthew Leopold,**  
**David Ross, and William Wehrum to be Assistant Administrators of the Environmental**  
**Protection Agency, and Jeffery Baran to be a Member of the Nuclear Regulatory**  
**Commission.”**

**October 4, 2017**

**Questions for the Record for Mr. William Wehrum**

**Ranking Member Carper:**

1. For decades, both Republican and Democratic administrations alike have had written policies limiting White House contacts with agencies that have investigatory and enforcement responsibilities. These policies have recognized that even a simple phone call from the White House to an agency inquiring about or flagging a specific matter can upset the evenhanded application of the law. I recently learned that Devon Energy, a strong political supporter of Administrator Pruitt’s, informed the EPA just 5 days after Mr. Pruitt was sworn in as Administrator that it was no longer willing to install air pollution technology or pay a high penalty to EPA for its illegal air emissions of cancer-causing benzene and other chemicals. We also know that Trump family casinos, hotels and golf courses have been the subject of EPA enforcement actions for violations of the Clean Air Act and Clean Water Act.
  - a. Do you agree that it is essential that in making decisions, EPA’s OAR must be shielded from political influence and spared even the appearance of being subject to political influence or considerations?
  - b. Will you commit to restricting communications between OAR and the White House staff regarding specific matters under the authority of OAR?
  - c. Will you commit to ensuring the staff of OAR is familiar with those restrictions?
  - d. Will you commit to advising this Committee within one week if any inappropriate communications from White House staff to OAR staff, including you, occur?

WLW: If confirmed, I will work as part of a unitary executive that is led by President Trump. I will work closely with EPA ethics officials to understand and strictly comply with my ethical obligations.

2. Recently, EPA conducted “anti-leaking” training for its employees<sup>1</sup>. According to EPA sources, the briefing stated that “Prohibitions we will discuss do not refer to “Whistleblowing”. Agency employees have the right to make lawful disclosures to anyone, including, for example, management officials, the Inspector General, and/or the Office of Special Counsel. Employees may make disclosures to the EPA Office of the Inspector General through the EPA OIG Hotline at 888-546-8740.” This presentation evidently failed to note the rights of federal employees have to make disclosures to Congress.  
5 U.S.C. § 7211, provides that: The right of employees, individually or collectively, to petition Congress or a Member of Congress or to furnish information to either House of

<sup>1</sup> [https://www.washingtonpost.com/politics/whitehouse/federal-employees-are-ordered-to-attend-anti-leaking-classes/2017/09/21/032b40d6-9edd-11e7-b2a7-bc70b6f98089\\_story.html?utm\\_term=.e2bfc5e54d95](https://www.washingtonpost.com/politics/whitehouse/federal-employees-are-ordered-to-attend-anti-leaking-classes/2017/09/21/032b40d6-9edd-11e7-b2a7-bc70b6f98089_story.html?utm_term=.e2bfc5e54d95)



Congress, or to a committee or Member thereof, may not be interfered with or denied. Pursuant to 5 U.S.C. § 2302(b)(8), it is a violation of federal law to retaliate against whistleblowers. That law states: Any employee who has authority to take, direct others to take, recommend, or approve any personnel action, shall not, with respect to such authority ... take or fail to take, or threaten to take or fail to take, a personnel action with respect to any employee or applicant for employment because of. ... (A) any disclosure of information by an employee or applicant which the employee or applicant reasonably believes evidences- (i) a violation of any law, rule, or regulation, or (ii) gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, any disclosure to the Special Counsel, or to the Inspector General of an agency or another employee designated by the head of the agency to receive such disclosures, of information which the employee or applicant reasonably believes evidences a violation of any law, rule, or regulation... " In addition, pursuant to 18 U.S.C. § 1505, it is against federal law to interfere with a Congressional inquiry: Whoever corruptly, or by threats or force, or by any threatening letter or communication influences, obstructs, or impedes or endeavors to influence, obstruct, or impede the due and proper administration of the law under which any pending proceeding is being had before any department or agency of the United States, or the due and proper exercise of the power of inquiry under which any inquiry or investigation is being had by either House, or any committee of either House or any joint committee of the Congress.

- a. If you are confirmed, will you commit to protect the rights of all career employees in OAR to make lawful disclosures, including their right to speak with Congress?
- b. Will you commit to communicate employees' whistleblower rights via email to all OAR employees within a week of being sworn in?

WLW: If confirmed, I will work closely with EPA ethics officials to understand and strictly comply with my ethical obligations.

3. In the wake of Hurricane Irma, at least 11 deaths and numerous injuries have been reported in Florida due to accidental carbon monoxide poisoning from gasoline-powered portable generators.<sup>2</sup> One additional death has also been reported in North Carolina, along with other injuries throughout the Southeastern United States.<sup>3</sup> Many of these deaths and injuries could have been prevented had stronger safety standards been in place for portable gasoline generators. In November 2016, the U.S. Consumer Product Safety Commission (CPSC), following years of work on the issue, voted to issue a Notice of Proposed Rulemaking (NPRM) to implement a mandatory safety standard for portable generators.<sup>4</sup> Since then, Administrator Pruitt and Acting CPSC Chairman Buerkle have separately opined that section 213 of the Clean Air Act precludes CPSC action.

- a. Section 213 of the Clean Air Act is intended to regulate emissions from non-road

<sup>2</sup> <http://www.miamiherald.com/news/weather/hurricane/article174097351.html> <http://www.sun-sentinel.com/news/weather/hurricane/sfl-carbon-monoxide-deaths-20170914-story.html>

<sup>3</sup> <http://www.charlotteobserver.com/news/article173612361.html>

<sup>4</sup> <https://www.federalregister.gov/documents/2016/11/21/2016-26962/safety-standard-for-portable-generators>



engines or vehicles when the EPA determines that such emissions “are significant contributors to ozone or carbon monoxide concentrations in more than 1 area which has failed to attain the national ambient air quality standards for ozone or carbon monoxide.” In your opinion, would the occasional indoor use of portable generators following a power outage be likely to be a significant contributor to ambient carbon monoxide concentrations in more than 1 area that has failed to attain the national ambient air quality standards for carbon monoxide? Why or why not?

- b. There are currently no areas in the United States that have failed to attain the national ambient air quality standards for carbon monoxide, and this has been the case since 2010<sup>5</sup>. As a matter of law, could section 213 of the Clean Air Act be used to regulate carbon monoxide emissions due to the indoor use of portable generators if there are no areas in the United States that fail to attain the national ambient air quality standards for carbon monoxide? Why or why not?

WLW: I do not have experience with interpreting or applying CAA § 213 to these circumstances. If confirmed, I will work with Administrator Pruitt as needed to properly implement this section of the Act.

4. Your public financial disclosure material lists, among others, several clients such as the American Petroleum Institute and others that are trade or other associations that consist of individual member companies. For each such association or organization listed on your financial disclosure form, please provide a complete list of the individual companies and other entities that comprise its members.

WLW: The trade associations listed in my financial disclosure are my clients and not their individual members. As such, I do not have current member lists for my trade association clients.

5. In addition to employees or representatives of the trade associations or organizations listed as your clients, have you met or otherwise communicated with employees or representatives of the companies that are members of the associations or organizations as part of your work for the client itself? If so, which ones?

WLW: The trade associations listed in my financial disclosure are my clients and not their individual members. I routinely meet with member companies, but do not keep comprehensive records of such contacts.

6. Your ethics agreement states that you “will not participate personally and substantially in any particular matter involving specific parties in which I know a former client of mine is a party or represents a party for a period of one year after I last provided service to that client, unless I am first authorized to participate, pursuant to 5 C.F.R. 2635.502(d).”

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<sup>5</sup> <https://www.epa.gov/green-book/green-book-carbon-monoxide-1971-area-information>

- a. Please provide a list of all such particular matters involving specific parties that you will either need to recuse yourself from or seek authorization to participate in. For each such particular matter, please also indicate whether you plan to seek authorization to participate.
- b. If that list does not include particular matters involving the list of individual companies and other entities described in question 4, why not?
- c. 5 C.F.R 2635.502(a) states that  
“where an employee knows that a particular matter involving specific parties is likely to have a direct and predictable effect on the financial interest of a member of his household, or knows that a person with whom he has a covered relationship is or represents a party to such matter, and where the employee determines that the circumstances would cause a reasonable person with knowledge of the relevant facts to question his impartiality in the matter, the employee should not participate in the matter unless he has informed the agency designee of the appearance problem and received authorization from the agency designee in accordance with paragraph (d) of this section.”

Do you agree that your representation of numerous industry clients in litigation to repeal or weaken EPA regulations would cause a reasonable person with knowledge of the relevant facts to question your impartiality if you are confirmed and continue to participate either in the litigation or in an administrative action designed to accomplish the identical outcome – repeal or weakening of an EPA regulation – that the litigation sought to accomplish? Why or why not?

WLW: Attachment A is a list of particular matters involving specific parties to which I believe my ethics agreement will apply. If confirmed, I will work closely with EPA ethics officials to understand and strictly comply with my ethical obligations.

7. Do you intend to participate in non-public meetings with your former clients or their member companies (as applicable) if you are confirmed, even if the meetings are about the repeal or weakening of the very same EPA regulations you sought, on behalf of those clients, to repeal or weaken through litigation? If so, please explain why this would not cause a reasonable person with knowledge of the relevant facts to question your impartiality in the matter at hand.

WLW: If confirmed, I will work closely with EPA ethics officials to understand and strictly comply with my ethical obligations.

8. Your Ethics Agreement also states that you will either recuse yourself from or seek authorization to participate in “any particular matter involving specific parties in which I know the law firm [Hunton & Williams] is a party or represents a party.” Please provide a list of all the EPA-related particular matters involving specific parties in which Hunton & Williams is a party or represents a party, and indicate whether you plan to seek authorization to participate in each such matter.

WLW: I do not have a list of all particular matters involving specific parties in which Hunton & Williams is a party or represents a party. If confirmed, I intend to ascertain Hunton's involvement on a case-by-case basis before becoming involved in any particular matter involving specific parties.

9. On February 28, 2017, President Trump directed EPA and the Army Corps to review and possibly rescind or repeal the Clean Water Rule in Executive Order 13776. EPA recently ended the public comment process on the first step of a two-step process to repeal the rule and replace it with a rule that will protect far fewer sources of drinking water. Individuals with first-hand knowledge of the process EPA utilized to prepare its have informed my staff that:
  - a) When EPA first submitted the proposed repeal rule to OMB, the draft stated that the agency would undertake a new cost-benefit analysis as part of the second step of its process.
  - b) OMB interpreted EPA's first proposal to mean that the rule's repeal would not avoid any costs to industry or have any economic impact at all. EPA's political staff then directed the career staff to undertake a new economic analysis. In response to this direction from OMB, EPA career staff reportedly changed the table included in the 2015 rule to a) reflect 2016 dollars instead of 2014 dollars, b) convert "annual costs incurred" under the Clean Water Rule to "annual costs avoided" due to its repeal and c) convert "annual benefits gained" under the Clean Water Rule to "annual benefits forgone" due to its repeal. This new table was sent to OMB on June 8, 2017.
  - c) OMB correctly concluded from EPA's June 8 submittal that repealing the rule would cost more in lost benefits than it would save industry in compliance costs. On June 13, 2017, presumably to avoid such an admission on the part of EPA, EPA career staff were verbally directed by political staff to solve this 'problem' by simply deleting the majority of the benefits of the rule from the table and re-submitting it to OMB, which they did<sup>6</sup>.

The direction that was reportedly provided to the EPA career staff to make the various revisions to what was submitted to OMB was verbal, not written. If you are confirmed, do you commit to ensure that career staff in OAR will receive appropriately documented, rather than verbal, direction from political officials before they take action? If not, why not?

WLW: If confirmed, I will work closely with EPA ethics officials to understand and strictly comply with my ethical obligations.

10. As Attorney General of Oklahoma, Administrator Pruitt copied and pasted materials sent to him by industry onto his own letterhead and sent them to EPA. Similarly, when you last served in EPA's air office, language drafted by your old law firm found its way into an EPA mercury regulation that you helped write. You also repeatedly prevented EPA

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<sup>6</sup> [https://www.epa.gov/sites/production/files/2017-06/documents/economic\\_analysis\\_proposed\\_step1\\_rule.pdf](https://www.epa.gov/sites/production/files/2017-06/documents/economic_analysis_proposed_step1_rule.pdf)  
See Table 1

employees from verifying the public health benefits of reducing mercury exposure.

- a. If confirmed, do you commit that you will not allow industry to exert an undue influence on any of the regulatory and policy efforts you will be charged with leading? If not, why not?
- b. Do you commit not to censor or exclude the dedicated and knowledgeable career EPA staff? If not, why not?

WLW: If confirmed, I will work closely with EPA ethics officials to understand and strictly comply with my ethical obligations.

11. Do you agree to provide complete, accurate and timely responses to requests for information submitted to you by any Member of the Environment and Public Works Committee? If not, why not?

WLW: [OCIR \*\*]

12. Recently, EPA announced that Administrator Pruitt would be publishing brief summaries of his calendars biweekly, after dozens of Freedom of Information Act requests for this information as well as a March request by me and my colleagues that he do so. During the Obama Administration, the Administrator, regional Administrators and all those serving in confirmed roles published their calendars daily<sup>7</sup>. If you are confirmed, will you commit to publishing your calendars daily? If not, why not?

WLW: If confirmed, I will make my calendar available on a timely basis.

13. In 2006, when you were last nominated to lead the Office of Air and Radiation (OAR), the then-Bush Administration requested for FY 2007 \$1.33 billion (adjusting to 2017 dollars) for State and Tribal Assistance Grants, of which \$250 million (in 2017 dollars) was for Air and Radiation programs. Earlier this year, the Trump Administration requested for FY 2018 \$597 million, of which \$168 million was for Air and Radiation programs. This is more than 50% less for the STAG program in general, and almost 1/3 less for Categorical Grants for OAR programs.
  - a. Did you support the request for FY 2007, and do you support the request for FY 2018? Why, or why not?
  - b. If you support both the requested levels in FY 2007 and FY 2018, why do you believe that a 1/3 cut to the funding levels in FY 2018 from FY 2017 levels is appropriate?

WLW: If confirmed, I will manage OAR's programs within the authorities and budget provided by Congress, including STAG grants.

14. How many legal cases have you filed, or joined others in filing against the EPA, since leaving the agency? Please provide a full list with the outcome of each case, including those cases in which the court disagreed with your argument, agreed with your argument,

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<sup>7</sup> <https://yosemite.epa.gov/opa/admpress.nsf/Calendars?OpenView>

and those in which the court refused to hear the matter.

WLW: [need case table \*\*]

15. You've represented industry in at least thirty-one cases against the EPA since you left the agency. Can you name one Clean Air Act regulation that was promulgated by the Obama Administration – not a voluntary or grant program – that you do support and why? If you support more than one, please name these as well.

WLW: I represent clients in private practice. It is my legal ethical duty to zealously represent their interests.

16. Delaware is already seeing the adverse effects of climate change with sea level rise, ocean acidification, and stronger storms. While all states will be harmed by climate change, the adverse effects will vary by state and region. Would you comment on why it is imperative that we have national standards to reduce carbon pollution? If you do not believe it is imperative, why not?

WLW: If confirmed, my primary responsibility will be to faithfully implement the Clean Air Act, including authorities and restrictions applicable to greenhouse gases.

17. In a *per curiam* opinion, the U.S. Circuit Court of Appeals for the District of Columbia affirmed the Endangerment Finding and the U.S. Supreme Court declined to issue a writ of certiorari on the D.C. Circuit's decision. The Endangerment Finding set in motion EPA's legal obligations to set greenhouse gas emissions standards for mobile and stationary sources, including those established by the Clean Power Plan in August 2015.<sup>8</sup> During an exchange with Senator Gillibrand during Administrator Pruitt's confirmation hearing before the Environment and Public Works Committee, he stated, "I believe that the EPA, because of the *Mass v. EPA* case and the endangerment finding, has obligations to address the CO<sub>2</sub> [carbon dioxide] issue."
- Do you agree with Administrator Pruitt's statement?
  - If the Clean Power Plan is withdrawn, and if confirmed, how will you lead the agency to fulfill its legal obligations to address climate change?

WLW: I agree with Administrator Pruitt. If confirmed, my primary responsibility will be to faithfully implement the Clean Air Act, including authorities and restrictions applicable to greenhouse gases.

18. EPA policy prohibits the use of non-EPA e-mail accounts and instructs employees to: "not use any outside e-mail system to conduct official Agency business. If, during an emergency, you use a non-EPA e-mail system, you are responsible for ensuring that any e-mail records and attachments are saved in your office's recordkeeping system." When last at the EPA, did you ever use personal email to conduct official EPA business? Did you ever use an email alias to conduct official EPA business when you

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<sup>8</sup> <https://www.epa.gov/climatechange/us-court-appeals-dc-circuit-upholds-epas-action-reduce-greenhouse-gases-under-clean>

last served at the agency? Do you commit that if confirmed, you will not use an email alias or use personal email addresses to conduct EPA business?

WLW: I do not recall using personal e-mail to conduct official business when last at EPA. I did not use an e-mail alias to conduct official business when last at EPA. If confirmed, I intend to use my EPA e-mail account to conduct official business.

19. Clean car standards save consumers money at the pump and help reduce oil imports. Automakers are complying with vehicle standards ahead of schedule. If confirmed, will you commit to support, defend and enforce EPA's current programs to address greenhouse gas emissions from vehicles?

WLW: If confirmed, my primary responsibility will be to faithfully implement the Clean Air Act, including authorities and restrictions applicable to greenhouse gases.

20. For the most part, patients and their families only participate in scientific trials and studies once they know their privacy - and any resulting health-related information - will remain confidential and secure. If confirmed, do you commit to respecting confidentiality agreements that exist between researchers and their subjects? Will you protect the health information of the thousands of people that have participated in health studies in the past?

WLW: If confirmed, I will work closely with EPA ethics officials to understand and strictly comply with my ethical obligations.

21. In December 2007, President Bush's EPA proposed to declare greenhouse gases as a danger to public welfare through a draft Endangerment Finding, stating, "The Administrator proposes to find that the air pollution of elevated levels of greenhouse gas (GHG) concentrations may reasonably be anticipated to endanger public welfare...Carbon dioxide is the most important GHG (greenhouse gas) directly emitted by human activities, and is the most significant driver of climate change."<sup>9</sup>
- a. Do you agree with these statements, if not, why not?
  - b. Did you participate in drafting the proposed Bush Endangerment Finding document in any way? If so, how?

WLW: I believe that the climate is changing and that anthropogenic emissions contribute to the change. I did not participate in drafting the proposed Bush Endangerment Finding document.

22. When you last served in the EPA OAR office, did the EPA ever propose to disapprove state mercury emissions control programs that were stronger than the Clean Air Mercury? If so, please provide how many times this happened and what your role was in these actions. Please also provide how this fits in Administrator Pruitt's views of

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<sup>9</sup>[https://insideclimatenews.org/sites/default/files/2007\\_Draft\\_Proposed\\_Endangerment\\_Finding.pdf](https://insideclimatenews.org/sites/default/files/2007_Draft_Proposed_Endangerment_Finding.pdf)



“cooperative federalism.”

WLW: I do not recall that EPA proposed to disapprove any state program proposed pursuant to the Clean Air Mercury Rule.

23. The Rule of Law Defense Fund is an affiliate of the Republican Attorneys General Association. Have you ever contributed any money or time to the Rule of Law Defense Fund?

WLW: No.

24. Have you ever contributed any money or time to two election fundraising groups, Oklahoma Strong PAC and Liberty 2.0 PAC?

WLW: No.

25. How many legal cases have you filed, or joined others in filing, that involved the Renewable Fuel Standard, biofuels or biodiesel since leaving the EPA? Please provide a summary of your argument and the outcome of each case, including those cases in which the court disagreed with your argument.

WLW: I am not authorized by my clients to discuss relevant cases.

26. Have you ever argued in court, or been part of a legal argument, that the Renewable Fuel Standard, as being implemented by the EPA, will lead to an increase in the overall demand for corn, which will lead to an increase in the price of corn? If so, please cite the case and the data used for the argument.

WLW: I am not authorized by my clients to discuss relevant cases.

27. In your 2005 EPW confirmation hearing, you answered a question, with the following, “I was barred for 1 year starting September 29, 2001, from participating in the particular matters listed in Attachment A of the memorandum and from taking official action on any particular matter in which my former clients, listed in Attachment B, were or represented a party to the matter. The ethics memorandum also addressed the general rulemakings on which I had represented various clients...With respect to the ethylene MACT rule and the semiconductor MACT rule, he [Kenneth J. Wernick, EPA's then Alternate Agency Ethics Official] concluded that it would be prudent for me not to handle these matters during my first year at EPA. Subsequent to that time, there was no bar to my participating as an EPA official in these rulemakings... In accordance with the ethics memorandum referenced above, I refrained for 1 year starting September 29, 2001, from participating in the particular matters identified by the memorandum and from taking official action with respect to any particular matter involving the entities listed in the memorandum. I also did not participate in the ethylene and semiconductor MACT rules in my first year at EPA.”<sup>10</sup>

<sup>10</sup> <https://www.gpo.gov/fdsys/pkg/CHRG-109shrg42275/pdf/CHRG-109shrg42275.pdf>

- a. Please provide a full list of the cases you filed, joined others in filing, or participated in some way related to the ethylene and semiconductor MACT rules prior to you joining the EPA in 2001. Please include any other work that you may have done while employed at Latham and Watkins – or any other organization – prior to coming to the EPA in 2001 that was related to the ethylene and semiconductor MACT rules.
- b. What led Kenneth J. Wernick, EPA's then Alternate Agency Ethics Official to conclude it wouldn't "be prudent" for you to handle the ethylene MACT rule and the semiconductor MACT rule during your first year at EPA?
- c. In 2001, what other issues and rulemakings did you have to recuse yourself for one year to meet the ethical standards set by the EPA?

WLW: Prior to and upon joining EPA in 2001, I sought, obtained, and strictly followed advice from EPA's ethics officials as to my ethical obligations related to my prior work in private practice. My prior ethics agreement is a matter of public record.

28. How many legal cases have you filed, or joined others in filing, since leaving the EPA that challenged rules the Obama EPA had to re-write because the courts said the original rules written by the Bush Administration were illegal?

WLW: To my knowledge, I have been involved in three cases challenging rules that EPA issued on remand from court decisions on Bush Administration air rules.

29. On July 8, 2003, Jeff Holmstead, then-EPA Assistant Administrator for Air and Radiation provided the following remarks in his written testimony to the House Energy and Air Quality Subcommittee of the Energy and Commerce Committee, "Clear Skies would also reduce mercury emissions from power plants. EPA is required to regulate mercury because EPA determined that mercury emissions from power plants pose an otherwise unaddressed significant risk to health and the environment, and because control options to reduce this risk are available."<sup>11</sup> At the time Mr. Holmstead provided these remarks, you were serving as his chief counselor within the EPA OAR office.
  - a. Did you agree at the time with Mr. Holmstead's determination, if so why? If not, why not?
  - b. Did you ever provide legal counsel to Mr. Holmstead, or others within the EPA, that helped provided the legal basis for these remarks?
  - c. Do you agree with Mr. Holmstead's remarks today?

WLW: I believe Mr. Holmstead was referring to Administrator Browner's 1999 "appropriate and necessary" determination, which was still in effect at the time. That determination, as amended in the Mercury and Air Toxics Rule, was determined to be illegal by the US Supreme Court.

30. On July 8, 2003, Jeff Holmstead, then-EPA Assistant Administrator for Air and

<sup>11</sup> [https://archive.epa.gov/ocir/hearings/testimony/108\\_2003\\_2004/web/pdf/2003\\_0708\\_jh.pdf](https://archive.epa.gov/ocir/hearings/testimony/108_2003_2004/web/pdf/2003_0708_jh.pdf)

Radiation provided the following remarks in his written testimony to the House Energy and Air Quality Subcommittee of the Energy and Commerce Committee:

“Mercury, a potent toxin, can cause permanent damage to the brain and nervous system, particularly in developing fetuses when ingested in sufficient quantities. People are exposed to mercury mainly through eating fish contaminated with methylmercury... EPA estimates that 60% of the mercury falling on the U.S. is coming from current man-made sources. Power generation remains the largest man-made source of mercury emissions in the United States...Mercury that ends up in fish may originate as emissions to the air. Mercury emissions are later converted into methylmercury by bacteria. Methylmercury accumulates through the food chain: fish that eat other fish can accumulate high levels of methylmercury”.<sup>12</sup> At the time Mr. Holmstead provided these remarks, you were serving as his chief counselor within the EPA OAR office.

- a. Did you have any involvement in the drafting of these remarks? If so, what was your involvement?
- b. Did you agree at the time with Mr. Holmstead’s remarks, if so why? If not, why not?
- c. Do you still agree with Mr. Holmstead’s remarks today? If not, why not?

WLW: I do not recall being involved in drafting Mr. Holmstead’s remarks. I believe that, for the most part, mercury emissions from power plants are dispersed widely in the global atmosphere. I believe that global mercury emissions inventories have significantly changed since my prior time at EPA. Therefore, I cannot speak to his comments related to domestic and global emissions inventories. I believe his comments about the movement and transformation of mercury in the environment are correct.

31. In the *White Stallion Energy Center v. EPA*, February 2012, industry argued, “the record does not support EPA’s findings that mercury, non-mercury HAP metals, and acid gas HAPs [hazardous air pollutants] pose public health hazards.”<sup>13</sup> Do you agree with this statement? Did you have any involvement with this case, if so, please explain.

WLW: I believe that comments were submitted to the record in this rulemaking demonstrating significant flaws in EPA’s exposure and risk assessment. I was not counsel of record in this case.

32. On April 17, 2012, Dr. Jerome Paulson, Chair, Council on Environmental Health, American Academy of Pediatrics, testified before the EPW Committee, stating, “Methyl mercury causes localized death of nerve cells and destruction of other cells in the developing brain of an infant or fetus. It interferes with the movement of brain cells and the eventual organization of the brain...The damage it [methylmercury] causes to an individual’s health and development is permanent and irreversible. ...There is no evidence demonstrating a “safe” level of mercury exposure, or a blood mercury concentration below which adverse effects on cognition are not seen. Minimizing

<sup>12</sup> [https://archive.epa.gov/ocir/hearings/testimony/108\\_2003\\_2004/web/pdf/2003\\_0708\\_jh.pdf](https://archive.epa.gov/ocir/hearings/testimony/108_2003_2004/web/pdf/2003_0708_jh.pdf)

<sup>13</sup> <https://www.cadc.uscourts.gov/internet/opinions.nsf/284AC47088C07D0985257CBB004F0795/%24file/12-1100-1488346.pdf>

mercury exposure is essential to optimal child health.”<sup>14</sup>

- a. Do you agree with the American Academy of Pediatrics’ finding on the importance of minimizing mercury exposures for child health? If not, please cite the scientific studies that support your disagreement.
- b. Do you agree the record supports EPA’s findings that mercury, non-mercury hazardous air pollutant metals, and acid gas hazardous air pollutants emitted from uncontrolled power plants pose public health hazards? If not, why not?

WLW: I am not familiar with Dr. Paulson’s testimony. I believe that comments were submitted to the record in this rulemaking demonstrating significant flaws in EPA’s exposure and risk assessment.

33. On July 8, 2003, Jeff Holmstead, then-EPA Assistant Administrator for Air and Radiation provided the following remarks in his written testimony to the House Energy and Air Quality Subcommittee of the Energy and Commerce Committee, “We have not developed methodologies for quantifying or monetizing all the expected benefits of Clear Skies... These estimates [for Clear Skies] do not include the many additional benefits that cannot currently be monetized but are likely to be significant, such as human health benefits from reduced risk of mercury emissions, and ecological benefits from improvements in the health of our forests, lakes, and coastal waters.”<sup>15</sup>

At the time Mr. Holmstead provided these remarks, you were serving as his chief counselor within the EPA OAR office.

- a. Did you have any involvement in the drafting of these remarks? If so, what was your involvement?
- b. Did you agree at the time with Mr. Holmstead’s remarks, if so why? If not, why not?
- c. Do you agree with Mr. Holmstead’s remarks today that it is currently difficult, or impossible, to monetize the reduced risk of human health and ecological benefits from reducing mercury emissions from power plants? If so, please explain. If not, why not?

WLW: I do not recall being involved in drafting Mr. Holmstead’s testimony. I believe that EPA was not able in 2003 to monetize all benefits associated with reducing mercury emissions. I do not know the current state of EPA’s knowledge.

34. In 2005 GAO report that reviewed EPA’s cost-benefit analysis for the Clean Air Mercury Rule, which you have testified you were heavily involved in writing, GAO identified, “four major shortcomings in the economic analysis underlying EPA’s proposed mercury control options that limit its usefulness for informing decision makers about the economic trade-offs of the different policy options.”<sup>16</sup>

<sup>14</sup> [https://www.epw.senate.gov/public/\\_cache/files/4/3/4324fd62-dc89-4820-bd93-ff3714fcb30/01AFD79733D77F24A71FEF9DAFCCB056.41712hearingwitness testimony paulson.pdf](https://www.epw.senate.gov/public/_cache/files/4/3/4324fd62-dc89-4820-bd93-ff3714fcb30/01AFD79733D77F24A71FEF9DAFCCB056.41712hearingwitness testimony paulson.pdf)

<sup>15</sup> [https://archive.epa.gov/ocir/hearings/testimony/108\\_2003\\_2004/web/pdf/2003\\_0708\\_jh.pdf](https://archive.epa.gov/ocir/hearings/testimony/108_2003_2004/web/pdf/2003_0708_jh.pdf)

<sup>16</sup> <http://www.gao.gov/products/GAO-05-252>

- a. Can you explain the cost-benefit analysis used for the proposed Clean Air Mercury Rule and why it was used?
- b. Can you explain why the GAO found short-comings with this approach?
- c. Do you agree that co-benefit pollution reductions should be considered when EPA is quantifying the benefits and costs of regulations? If not, why not?
- d. While you were at EPA, did the agency ever use co-benefits to justify a clean air rule and has this approach ever been used in the past?

WLW: I do not recall being involved in preparing the cost-benefit analysis for the Clean Air Mercury Rule. If confirmed, I intend to address the question of how co-benefits should be considered in cost-benefit analyses. I cannot prejudge the outcome because any such analysis would be an integral part of informal legislative rulemaking.

35. You were substantially involved in EPA's proposal and adoption of the Clean Air Mercury Rule and accompanying Delisting Rule. In 2005, for your EPW confirmation hearing you were asked the following question for the record: "With regard to trading of mercury, in your view, would it have been legally acceptable for EPA, taking into account the requirements of the Clean Air Act, to propose and adopt a facility specific mercury MACT that did not allow trading?" You answered, "After considering the utility unit emissions that would remain following imposition of the requirements of the Act, EPA determined that it was neither appropriate nor necessary to regulate utility units under section 112 of the Clean Air Act. Once EPA made that determination, it would not have been legally appropriate for EPA to issue a MACT standard." Three years later, the D.C. Circuit vacated the EPA's decision to delist power plants as a source under Section 112. Six years later under the Obama Administration, the EPA issued the Mercury and Air Toxics Rule to address mercury and air toxic emissions from power plants under the Section 112 of the Clean Air Act.

- a. Did you disagree with the court's ruling and legal reasoning against the EPA's actions while you were at the agency on mercury and air toxic power plant emissions? Do you continue to disagree today?
- b. Do you still hold the position that it is not "appropriate nor necessary" for the EPA to regulate utility units under Section 112 of the Clean Air Act and therefore, still agree it is not legally appropriate for EPA to issue a MACT standard, as the EPA did through the Mercury and Air Toxics Standard? If so, please explain.
- c. If you do not agree that EPA has met the "necessary and appropriate" criteria found in Section 112(n), what is your understanding of what that would mean for the Mercury and Air Toxics Rule?

WLW: I respect the court's decision with regard to the Clean Air Mercury Rule. I also respect the US Supreme Court's determination that the "appropriate and necessary" finding relied upon in the Mercury and Air Toxics Rule was illegal.

36. The US Supreme Court has expressly declined to consider whether EPA should have